

MILLING WORLD

AND
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XIII. NO. 1.

BUFFALO, N. Y., SEPTEMBER 7, 1885.

\$1.00 PER YEAR.

ROLLS must go. To be sure they must. What did you put them in for?

A GOOD many orders for milling machinery, which were given and countermanded three months ago, are now being renewed. Not a bad sign is it?

NERO fiddled while Rome was burning, and, happy parallel, people flock into dime museums while the country, from a business standpoint, is going to the dogs. Nero's fiddling, we understand, was quite up to the standard of dime museum acting.

ST. LOUIS is putting on any number of "scallops" in the anticipation of an unprecedentedly big demand for wheat, for milling purposes, from the millers in the section tributary to her. It would be a nice thing if her anticipations could be realized.

UNLESS all signs fail the South another year will be a pretty good field for the mill furnishers to operate in. Not big, but good, as the people of that section will have money to spend and they are beginning to see how foolish it is to send money away up North for what they can make themselves. This is simply a prediction; mark its accuracy.

THE circulation of THE MILLING WORLD for the six months ending August 31, aggregated 134,318 copies; an average of 22,386 copies per month. This is very considerably in excess of the circulation that we guarantee. We would be glad to have our circulation compared with that of any mill-furnisher's organ. Further; we would like to have our rates for space compared with any one or all of them. If you *must* be bulldozed into advertising in these organs, insist at least upon paying no more than THE MILLING WORLD will charge you for a like amount of service.

THE International corn market opened at Vienna last Monday. A report on the crop of 1885 was read. The wheat crop in Hungary was reported as fine. One hundred and fifty thousand hectares more were sown than in 1884, and the crop is estimated at more than 40,000,000 hectolitres. The European wheat crop was reported as follows, on the basis of 100: Austria, 104; Hungary, 117; Prussia, 94; Saxony and Bavaria, 100; Baden, 97; Wurtemburg, 99; Denmark, 116; Sweden and Norway, 105; Italy, 70 to 85; Switzerland, 125; Holland and Great Britain, 95; Russia, 75 to 100; Roumania, 80 to 215; Servia, 110.

LOOK here, gentle mill-furnisher—all mill-furnishers are gentle now, they have to be—does it not strike you that friendship or fear governs the bestowal of your advertising favors to a much too large extent? Do you regard the bestowal of your advertising as a favor conferred? If so you are on the wrong track. Men never get rich by bestowing favors. Pinch your dollars; get all you can for every one you expend. You can get more for your money from THE MILLING WORLD than from any other medium. This is a fact. Shrewd advertisers look for, and demand, publicity. THE MILLING WORLD will give you this in the best possible manner, and for less money than any other medium. This is also a fact, that you should remember. You try it.

WE have received a copy of N. W. Ayer & Son's American Newspaper Annual for 1885, which contains a carefully prepared list of all newspapers and periodicals in the United States and Canada, arranged by states in geographical sections, and by towns in alphabetical order. It gives the location, county-seat and population of every county in the United States. It also gives the politi-

cal majority of every state, territory and county, and the number of votes polled by the greenback and prohibition parties at the presidential election of 1884. Taken all in all we regard this as the best and most elaborate newspaper directory published.

AT Allegheny City, Pa., a few days since a little child was fatally poisoned, and two servant girls made deathly sick from eating oatmeal. We make record of this because it is well that people should be made aware of possible injury resulting from a too blind confidence in the healthfulness of this product as an article of diet. The fact that Mary Allen, a colored nurse who had been notified to leave, had threatened to "show them all before next Wednesday that she was no fool," may, in this solitary instance, have had something to do with it. At any rate the minions of the law have pounced upon Mary, and will give her an opportunity to elucidate how she contemplated demonstrating to the family that "she was no fool." Everything considered we are inclined to strongly advise people not to eat oatmeal—unless they want it.

GREAT heads ornament the top end of our elevator men. Frank Williams & Co. have completed a transfer elevator, and are prepared to handle grain for $\frac{1}{2}$ cent less than the Association. This, of course, is not in harmony with the comfort of the members of this highly respectable body, and it is said that a determined effort is being made by the Association to keep business out of the new elevator's reach. Not a grain receiver in Buffalo, according to the statement, dares give it a cargo of grain, and shippers have been notified that if they send this "outside" concern any grain the other elevators will refuse to handle their grain in future. In view of this system of boycotting the firm are now prepared to take another step. They will solicit consignments to themselves, and they believe that there are shippers who are not above saving half a cent a bushel on the Buffalo transfer if they can do so by merely consigning cargoes to the new elevator. The elevator has rail as well as water connections, and it is prepared to do considerable business in spite of its inexpensive build and humble pretensions.

SEVERAL years ago when THE MILLING WORLD pointed out the probability of India becoming a formidable competitor of the United States as a wheat exporting country, it was almost jeered at by its very esteemed contemporaries. Exports from that country have however gone on increasing and now we are told they are building a new line of railroad in Central India, to be known as the Midland Indian, which will bring Bombay into immediate connection with Agra and the country south of it. This is the district where wheat grows in such profusion that large portions of the crop are annually left to rot on the ground for want of a market. A pamphlet recently published in Calcutta shows that this sort of useless overproduction has occurred when the natives in other districts of India were dying of famine, there having been no means of carrying the wasting food to the hungry mouths. The construction of the line of railroad above mentioned will tend to prevent similar anomalies in future, and as the capital for it is guaranteed by the British Government, there is every reason to believe that the work will be pushed to a speedy completion. One point referred to in the Calcutta pamphlet will be of interest to American wheat-growers. It is stated, on apparently indisputable authority, that wheat in the country referred to can be grown in any quantity at a cost of from 5s to 6s a quarter, or about 16 cents a bushel. If this be true, what chance will American farmers have in competition for the English market when this new wheat region is brought within 700 miles direct railroad communication with the sea at Bombay?

[ESTABLISHED 1856]

EUREKA GRAIN CLEANING MACHINERY**OVER 18,000 MACHINES IN USE!**

OUR LINE COMPRISSES

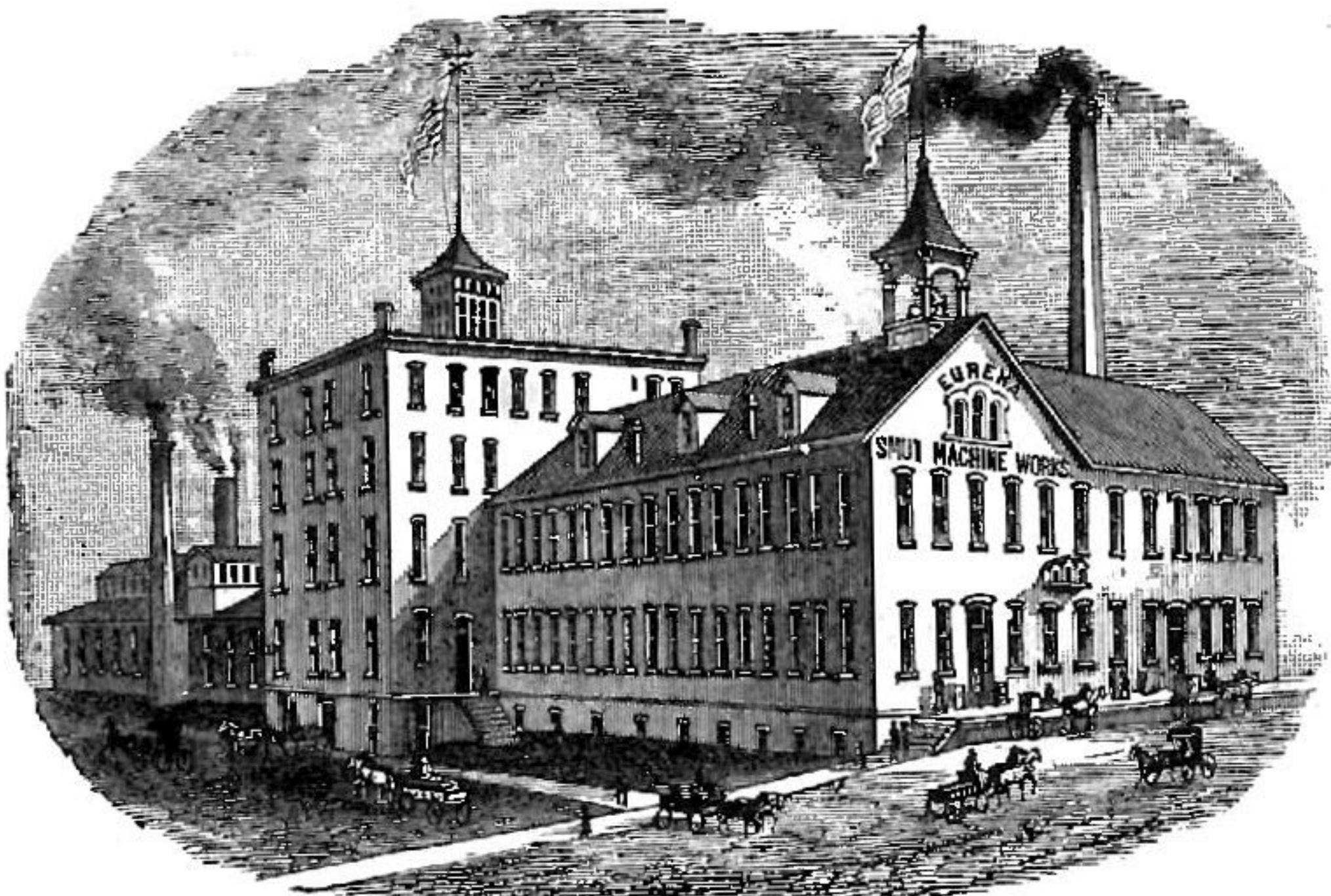
THE EUREKA SEPARATOR, EUREKA SMUTTER & SEPARATOR,
 EUREKA BRUSH FINISHER, SILVER CREEK FLOUR PACKER,
 THE EUREKA MAGNETIC AUTOMATIC SEPARATOR.

Our establishment is the oldest, the largest and most perfectly equipped of its class in the world, and our machinery is known and used in every country where wheat is made into flour.

HOWES & EWELL,
SILVER CREEK, N. Y.

European Warehouse and Office: 16 Mark Lane, London, E.C., England. Gen. Agency for Australian Colonies and New Zealand.

THOS. TYSON. Melbourne, Victoria.



C. N. SMITH'S CENTRIFUGAL REEL
 IS BEYOND QUESTION THE BEST IN THE MARKET
AND IS SOLD FOR THE LEAST MONEY

While the Operation of Every Machine is Fully Guaranteed.

Send for Prices, Lists of Testimonials and Descriptive Catalogue.

READ THIS LETTER. THEY WILL DO AS WELL FOR YOU.

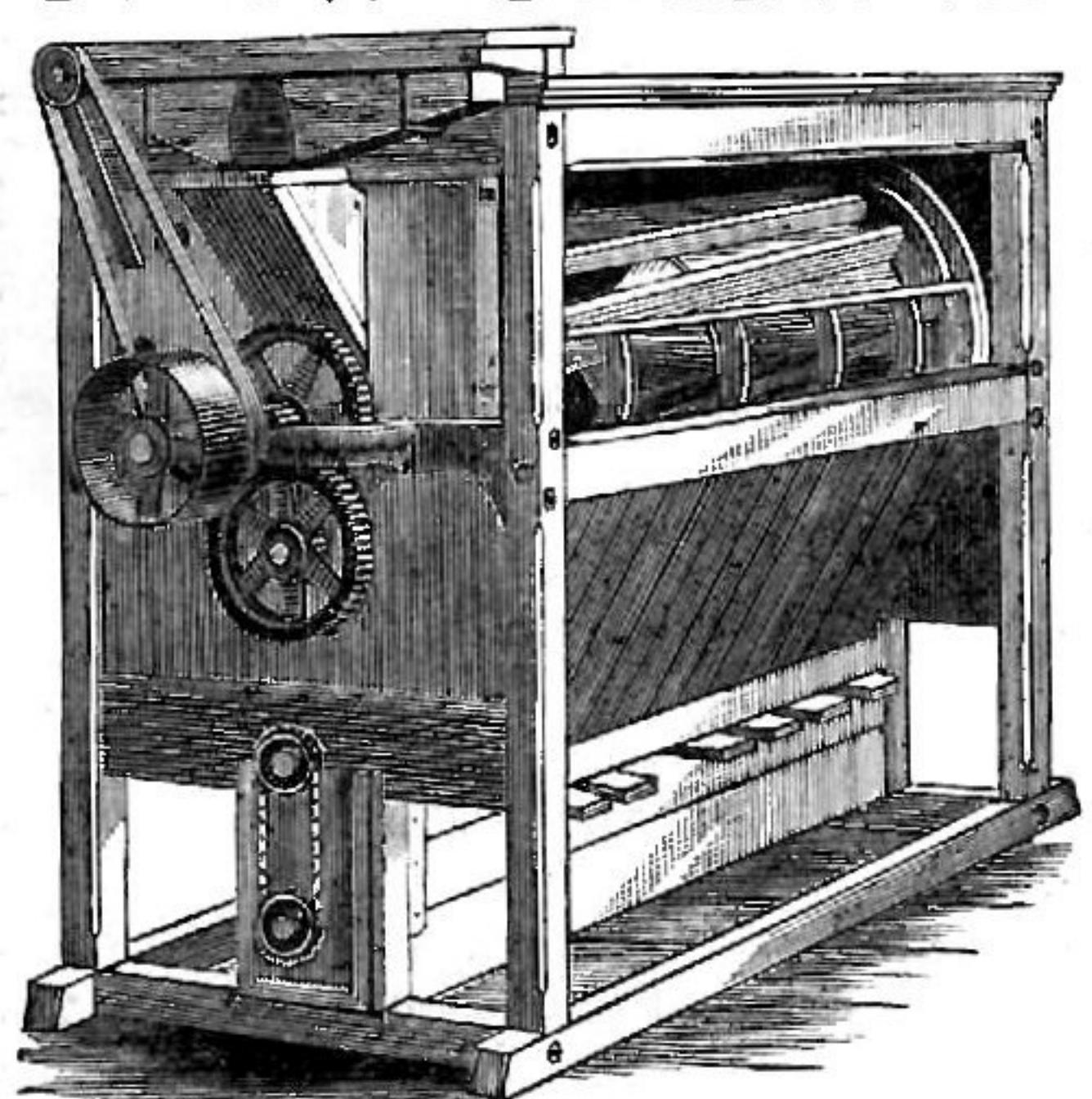
OFFICE OF LUDLOW MILLS, DAYTON, OHIO, April 23, 1884.

MR. C. N. SMITH.
 We have been running the two Centrifugals since February, the first without any stop whatever, and are well pleased with them. We throw less stock on our Rolls, and make four to five per cent. less Low Grade than before we had the Machine. You can refer any one to us and we will be pleased to give it a good send off. Wishing you success, we remain,
 Yours respectfully,
 CHAS. SHUEY, Head Miller.

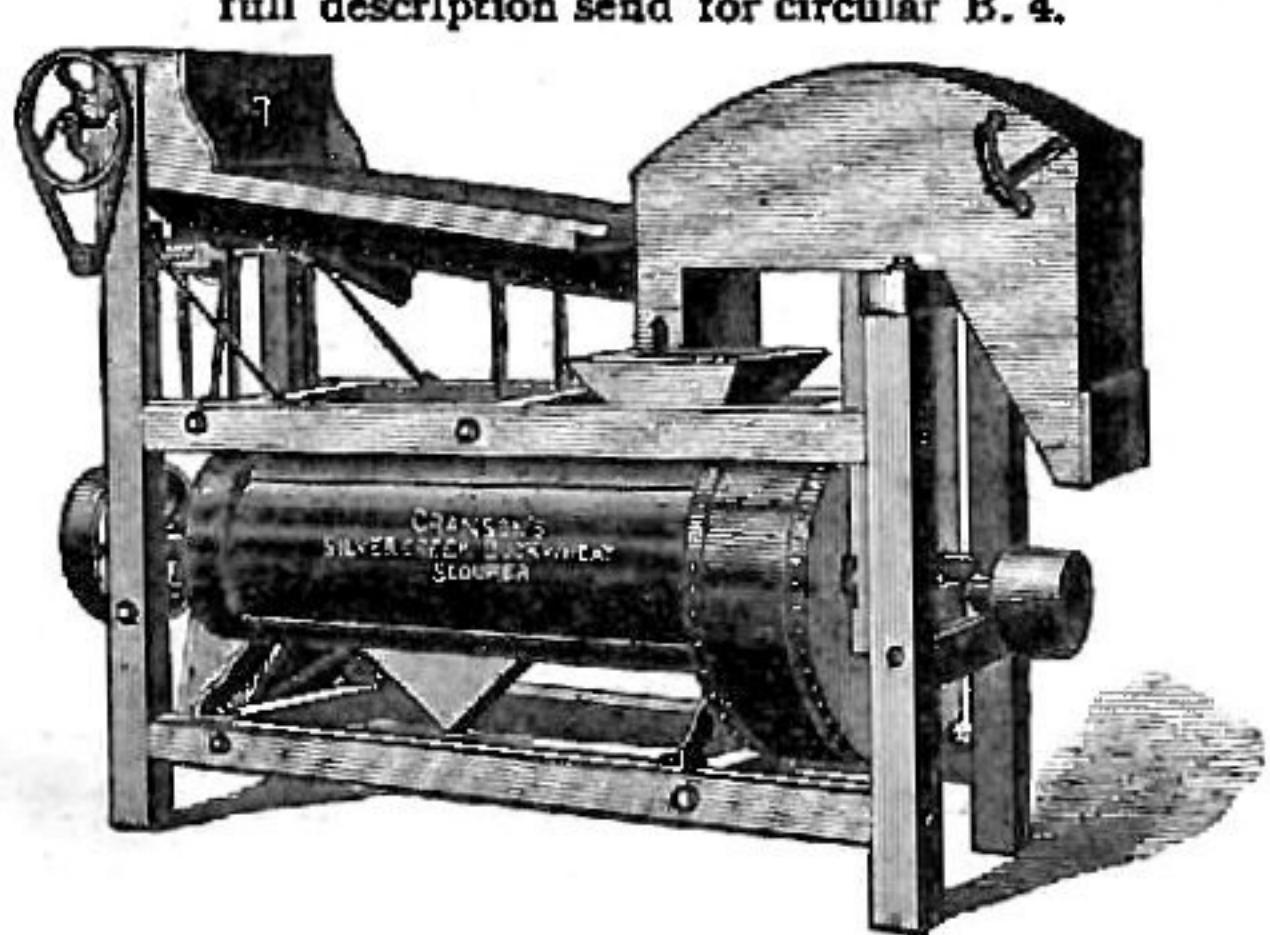
CHAS. S. DURST, Supt.

MANUFACTURED ONLY BY

C. N. SMITH, DAYTON, OHIO
 MANUFACTURER OF MILL FURNISHINGS.



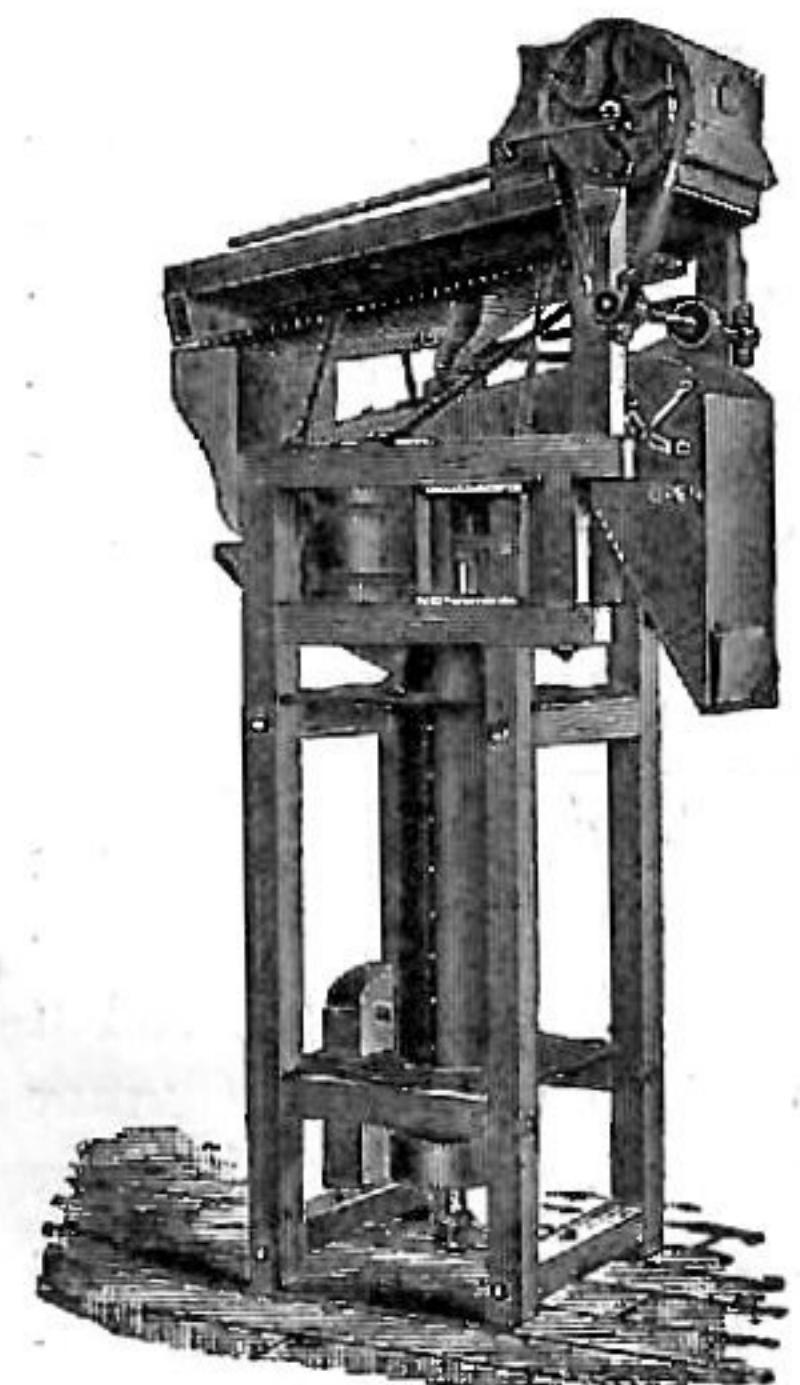
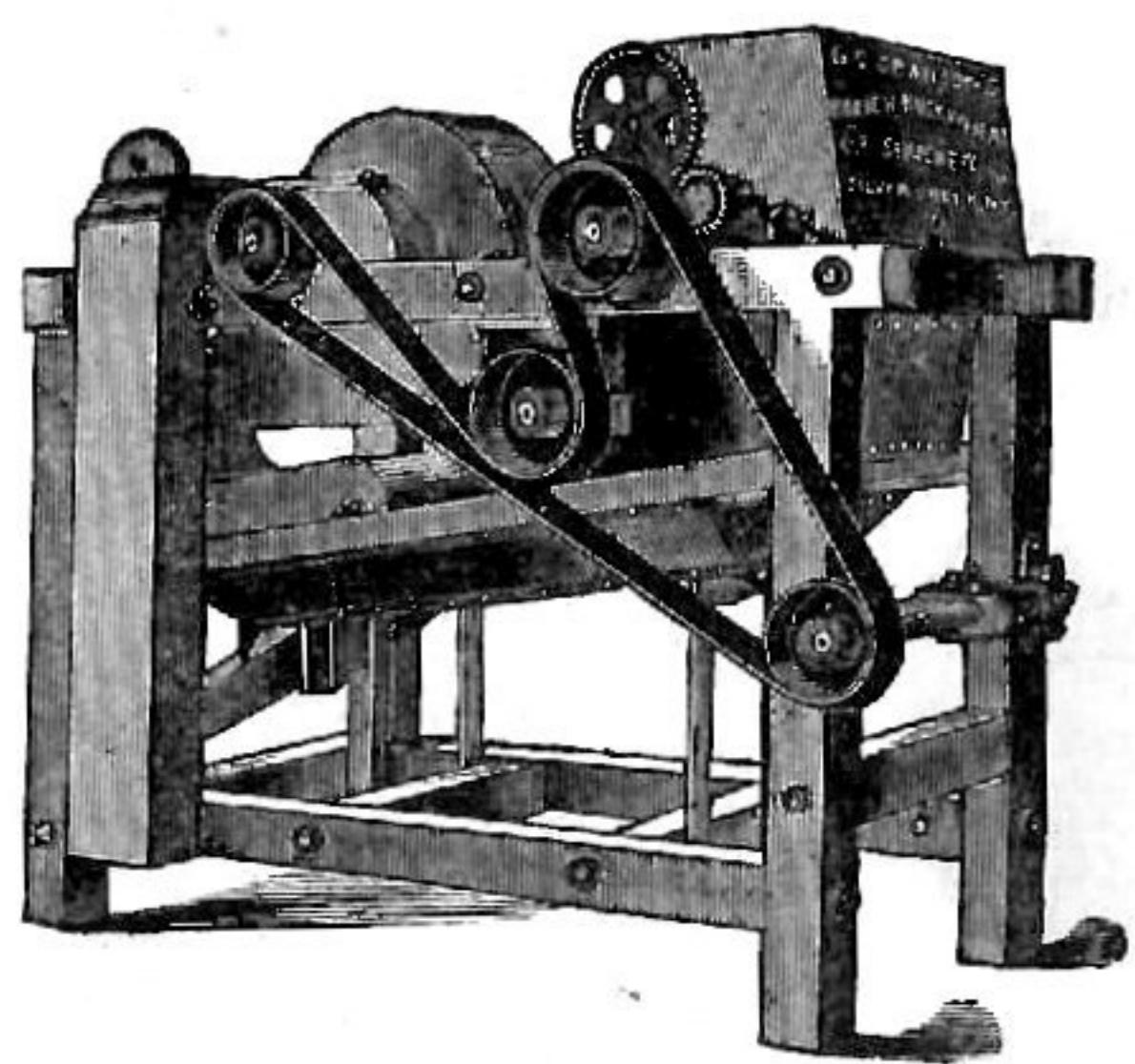
CRANSON'S UPRIGHT SCOURER
is shown by the first cut in this advertisement. For full description send for circular B. 3.



CRANSON'S HORIZONTAL SCOURER.

is shown by the second cut in this advertisement. For full description send for circular B. 4.

CRANSON'S SILVER CREEK
ROLLER BUCKWHEAT SHUCKER
is an acknowledged necessity if purity of flour is desired. More than 1000 in successful operation. Send for circular A.



G. S. Cranson & Son, Silver Creek, N.Y.

**Write for New List
 B1, Showing Dis-
 counts We Allow
 on All Orders for
 Excelsior Bolting
 Cloth. It will pay
 you to do so.**

EXCELSIOR
 This Cloth
 Is, without question
THE BEST ON THE MARKET,
 Which we guarantee it to be
 or NO SALE.

Also
 MANUFACTURERS OF

ANCHOR BOLTING CLOTH

BURTELEY & HAMMOND, TESTING SIEVE
 Something every miller ought
 to have TO TEST PRODUCT.

SILVER CREEK, N.Y.

PUBLISHED EVERY MONDAY BY
THE AMERICAN INDUSTRY PRESS, LIMITED.

OFFICES, LEWIS BLOCK, SWAN STREET, BUFFALO, N. Y.

G. B. DOUGLAS, Managing Editor. THOS. MCFAUL, General Agent.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.00 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter, at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$1.75 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Transient advertisements \$1.50 per inch; \$11.00 for $\frac{1}{4}$ page; \$20.00 for $\frac{1}{2}$ page.

Advertisements of Mills for Sale or to Rent; Partners, Help or Situations Wanted, or of a similar character One cent per word, each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning, to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trades.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

"The Milling World" is one of the few milling papers which represent and reflect the state of the trade without fear or favor. It should not be confounded with any of the private scullery organs, conducted ostensibly by individuals but which are in reality issued in the interests of some mill-furnishing house for the purpose of advancing its own interests and disparaging those of more honest competitors.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

HAS IT PAID?

FOUR years ago no trade was brisker, no business more prosperous and profitable, than that of mill furnishing; to-day it is questionable if any is in a more unsatisfactory condition. It is worth while to briefly inquire into the causes which have had influence in bringing about this lamentable condition of affairs, and particularly so, as there is fair evidence of a somewhat general business revival, the inauguration of which, it is strongly hoped, will favorably affect this very important branch of industry.

When it was predicted that we were about to enter upon an era of depression the majority of the press of the country took the ground that such a thing was almost, if not quite, impossible; that our season of prosperity had not been sufficiently long-continued to warrant anticipation of even slight reaction. But the prophets of disaster were in the right, and disaster came. Those who could trimmed their sails to weather the storm; those who could not went down before it. Singularly, perhaps, there were but few wrecks, and those comparatively unimportant, in the mill-furnishing trade. It was, however, a matter of extreme difficulty, apparently, to convince individual members of the trade that a season of depression, and comparative idleness was before them; business had been so buoyant that they could not realize contrary conditions must exist, so production was not immediately scaled down. Sales, however, became more difficult to effect; orders gradually became fewer in number, and contracts were regarded as of almost priceless value, albeit money might be lost in their execution. A reckless cutting of prices quickly ensued benefiting nobody, not even the miller who might be the purchaser of the machine, or for whom the contract might be executed.

Had this cutting in prices been confined solely to manufacturers who came into direct competition, the evil outgrowth thereof would have been of less importance than has actually resulted. In a number of instances manufacturers have bid squarely against their duly appointed agents, quoting would-be purchasers of two, three or four machines, prices lower than they would allow these agents who were working for their direct interests, and this has been done not in ignorance but with full knowledge that the agent was using every endeavor to secure the order. Does any reputable manufacturer think this has paid? Will it advance their future interests in

the least? Other practices, equally reprehensible have grown up in the trade. In the filling of orders, inferior goods to those called for have been supplied, under the presumption, apparently, that the purchaser would not know the difference. This has been done, too, without any real benefit accruing to the seller, as in the great majority of such cases the article has been supplied at the price it cost the seller. Seemingly the one prevailing desire has been to do "business" regardless alike of present gain or loss, and future relations with present customers. Has this paid?

We would not be understood as even intimating that the trade, as a whole, has resorted to dishonorable practices to keep things moving; by no means; but individual members of it have crowded the line of strict honesty of representation a little too closely for the benefit of themselves and the real good of the entire trade. We don't think, for instance, that it pays to sell an inferior article of bolting cloth under the name of a recognized and generally conceded superior one, yet this has been practiced to no little extent. The reckless competition which the past two years has developed, while, perhaps, serving to keep things moving, has had a bad effect upon the mill furnishing trade, and this will become more and more apparent if a revival of activity sets in at an early day.

IF you are interested in corn meal milling, write the Case Manufacturing Co., to tell you something about what they can do for you.

FORTY-EIGHT is the number of Buckwheat Shuckers sold by G. S. Cranson & Son, of Silver Creek, N. Y., during the month of August, their shipments on the last day of the month being fourteen.

VERY neat, pretty, and convenient is that new catalogue just issued by James Leffel & Co. Drop them a postal card asking them for a copy; their address is Springfield, O., or 110 Liberty street, New York City.

WE spent a very pleasant twenty minutes, the other day, with Mr. Louis E. Barbeau, manager of the European business of Messrs. Howes & Ewell, of Silver Creek, N. Y. "As misery loves company," perhaps our mill-furnishers will be glad to know that competition is almost as brisk over the sea as here. Mr. Barbeau will make but a brief stay in this country and Canada before returning to his field of labor.

LAST week we had an advertisement over the signature of the Eldred Milling Co., of Jackson, Mich., offering several Prinz dust collectors for sale very cheap. This week we have an advertisement over the signature of the Superlative Purifier Manufacturing Co., of Milwaukee, Wis., offering several Smith purifiers for sale cheap. This is a great world. If we were a miller we'd break a leg but what we'd buy those machines.

READERS of THE MILLING WORLD are, by this time, pretty well aware of the fact that the system of all-centrifugal bolting devised and perfected by Aug. Heine, of Silver Creek, N. Y., is in successful operation in both full roller and full burr mills, and this successful operation is not of a few days or a few weeks duration but is long continued and in actual everyday service. Mr. Heine says that all mills furnished with his machinery are built for service and to make money by *milling*, and not for the purpose of advertising what he can do.

JUST for the fun of it note the actual circulation which THE MILLING WORLD has given its patrons in the past six months:

March, 1885,	21,000 copies.
April, "	21,150 "
May, "	21,200 "
June, "	25,000 "
July, "	20,968 "
August, "	25,000 "
Total,	184,318 "

Our charges for space are absolutely the lowest. Our circulation is unquestionably the largest. The shrewd advertiser will find much to digest in these figures, and, mind you, these figures are made in cold type; you have them for future reference, and we promise not to fall very much below them during the coming six months. Make a note of that, too,

GRAIN TRANSPORTATION BY LAKE.

ON the northern lakes, embracing the steamboat interests of states and parts of states tributary to these waters, but excluding lake Champlain, there were at the close of 1880 steamers to the number of 947, measuring 222,290 tons, valued at \$13,920,000. They gave employment to 9,143 men with a pay roll of \$3,294,000, which gave an average of \$360 per man, exclusive of those employed on shore. The freight moved by these steamers amounted to 4,368,000 tons, exclusive of lumber which approximated 318,889,000 feet. In the grain trade the number of steamers approximated sixty-seven, measuring 80,669 tons, valued at \$4,777,700. The practice of steam barges towing one or more vessels has become general on the lakes, so that a very large proportion of the freight is moved by steam. The fuel consumed by the steamers on the northern lakes consists largely of coal of the bituminous variety from southern and central Ohio, and slabs and poor grades of wood and refuse. A comparison with the quantity of coal of the same kind burned on the Ohio and Mississippi river boats, where such a wanton extravagance is shown in the use of fuel shows what can be done with the best machinery now in use on most of the lake steamers, and demonstrates how very small the expenses for coal are in comparison with the amount of freight carried and the number of miles run. The time does not appear to be very distant when sailing vessels will be a rarity unless as a consort to a large propellor or steam barge.

Previous to the war of 1812 quite a flourishing commerce was carried on upon Lake Ontario, by sailing craft, but it was not until 1816 that the side wheel steamer "Ontario" was built, being the first steamer on the American side. She measured 231 tons and ran until 1832. The first steamer on the upper lakes was the Walk-in-the-Water, launched at Black Rock, near Buffalo, N. Y., in 1818. She was 342 tons, and traded between Buffalo and Mackinaw. In 1820 there were only four steamers on all the northern lakes, while the western rivers had already 71, and 52 were employed on the Atlantic coast. Within the next decade they had built eight steamers on the lakes with a measurement of 1,505 tons. The growth of steam navigation on the lakes has been much retarded by the want of good harbors where the property could be protected against the gales that sweep these waters annually. In 1855 the steam inspection service reported the number of steamers on the northern lakes as follows: Licensed boats, 128, with 68,089 tons; unlicensed boats, 115, measuring 21,252 tons. The next authentic statement of this tonnage was by the register of the treasury in 1870, when 642 steamers, measuring 142,970 tons were reported. The first propellor was built on the lakes in 1841; in 1850 this number had been increased to 50. The first trip by steamer from Lake Erie to Chicago was made in 1832. The river tug service was inaugurated in 1845; this service is now performed by a class of powerful tugs that are used to tow sailing vessels through the Detroit river.

BRITISH AGRICULTURE.

A VERY interesting examination of the condition of British farms, and of the taxation which they bear, appears in the London "Economist," in a letter by W. J. Harris, M. P., which the "Economist" prominently publishes without endorsing all its positions. The facts appear to be stated with care, and by one who is more than ordinarily skilled in the examination and use of agricultural and economic statistics. It appears that the saleable produce of the soil of England and Wales amounts in the aggregate to £112,511,490, or about \$562,557,450. In this computation the author does not deduct those products which the farmers themselves consume, or the value of them, and it is by no means clear that adequate allowance for such consumption is made in the estimate of wages or cost of labor. The principal items included are about \$74,000,000 for wheat, about \$61,000,000 for barley, \$48,000,000 for oats, \$24,000,000 for beans, peas and rye, \$32,000,000 for straw, \$46,000,000 for turnips, \$24,000,000 for potatoes, \$14,500,000 for mangolds, \$134,000,000 for hay and \$136,000,000 for pasture, \$10,000,000 for hops, flax, etc.; \$24,500,000 for orchard and garden products, and \$6,000,000 for feed on waste land. From this is deducted the feed of working horses used solely in agriculture, in number 847,592, estimated at \$84,750,000. The only allowance separately made for animal food products is one of \$32,500,000 for the animal food produced from the purchase of various foreign foods. But there is a palpable error

at this point in the calculation, since the valuation of the various kinds of products enumerated is not an accurate measure of the value of animal food produced for sale.

The taxation borne by the farms is next examined, and it appears to amount to \$80,075,000 yearly, the most important items being \$35,000,000 local rates applying exclusively to agricultural land, \$20,000,000 tithes, and \$8,500,000 "land tax redeemed and unredeemed." It is urged in the communication that this great national industry thus pays over \$80,000,000 on a production yearly of \$562,000,000, while compelled to compete directly with the owners of foreign virgin soil, whose burdens of taxation are not one-fourth as great. In other words, it is claimed that "every English bred bullock sold at £30 has paid to national objects of one sort or another £4 6s, while every sheep sold at 50s has contributed in like manner 7s 6d for the same purposes. It amounts to a charge of nearly 15 per cent. on the result." This is not a correct statement, because, as has been remarked, the value of pasture and of products used as food does not fully measure the selling value of animals raised by the use of such food. Nevertheless the statement shows in a striking light the very heavy burdens which British agriculture is compelled to bear, and goes far to explain the decline of agriculture in Great Britain, when forced to compete directly with farming in other countries where taxation is very much lighter, and where the cost of land is very much less.

Attention will be attracted especially by the statement of the cost of labor on British farms. It is estimated that 870,000 men are engaged in agricultural labor in England and Wales, and that their wages average 15s per week. The writer says "they really vary from 10s to 18s, but there are harvest perquisites, piece-work and overtime, which would make the average of 15s about a fair calculation." This results in an expenditure of \$173,500,000 yearly, as the cost of labor on farms, and it is especially to be noticed that this is a little more than double the amount of taxes paid. The next item considered is the rental value of farms, which is calculated at \$215,000,000. It then appears that from the remainder there must be deducted the cost of manures, and of repairs for tenants, and the tradesmen's bills of the farmer and his family, so that what is left is practically nothing. In other words, the farmer gets wages, and if he owns the land, a decent rental value for it, but gets nothing more.

The contrast between the condition of agriculture thus disclosed and the results of agriculture in this country is very striking. In this country the value of one or two important products actually shows the entire estimated value of all saleable products of British agriculture. The taxation here is very much lighter, both with respect to the value of products and with respect to the number of acres employed. Then as respects the cost of labor, there is no part of the United States in which efficient farm labor can be found at an average not exceeding 15 shillings per week. Yet the cost of labor in this country certainly bears a smaller proportion to the value of products of agriculture than the proportion estimated by the British statistician. The conclusion to which these figures point is one which accords closely with the result reached by the Agricultural Commission, after its investigation in this country some years ago, namely, that as regards exportable products British agriculture can no longer hope to compete on equal terms with agriculture in this country.—Ex.

BUSINESS SIGNS.

NEAR the close of July Bradstreet's noted the fact that the record for the first six months of the year "gave few signs favoring the near approach of speculative activity and high prices." At the same time it was pointed out that the underlying conditions of business had become "much more favorable." Since then an upward movement in the New York stock market and an advance in the prices of some of the great staples have helped to widen and intensify the desire to read aright the current business signs. In considering the facts as they develop it should be borne in mind that in the last half dozen years or more the publicity of the country and of the world has greatly increased in volume and in searching character. Lines of fact are disclosed now which in former years remained hidden as regards the general public. A danger exists, therefore, that this or that group of facts may be given a wider meaning than its importance deserves. On the other hand, it has to be said that the logical effect of a constantly increasing publicity

must inevitably be to lessen the ups and downs of commerce, or, in other words, to substitute gradually lessening curves for the sharp declivity and the direct ascent. This being true, it is possible that a way out of the present low price period may appear without the extreme of speculative activity.

How have prices changed since the lowest figures touched in 1884, the year of greatest depression thus far? The following comparison covers leading staple products:

MOVEMENT OF FOOD PRODUCTS PRICES.

	Wheat, No. 2 red.	Flour, Extra.	Corn, No. 2 mxd.	Butter, st.dairy.	Cheese, st.fact'ry.
1884 (lowest).....	81½c.	\$3.00	48c.	10c.	8½c.
1885 (present).....	94	3.20	53½	18	6½
	Sugar, fr. refg.	Coffee, fr. Rio.	Tea, Formosa.	Rice, domes.	Tobacco, leaf.
1884 (lowest).....	4½c.	9½c.	27c.	6½c.	8½c.
1885 (present).....	5½	8½	28	6	3½
	Beef, fresh.	Mutton, fresh.	Pork, mess.	Beef, mess.	Lard, refined.
1884 (lowest).....	7c.	6½	\$12.00	\$11.50	7¾c.
1885 (present).....	9	8	10.50	10.00	6½

MOVEMENT OF TEXTILE STAPLE PRICES.

	Cotton, mid. ups.	Wool, Ohio X.	Cotton, print cloth.	Flannels, F. & C.
1884 (lowest).....	9¾	32	38-100	35
1885 (present).....	10 5-16	31	3½	35

MOVEMENT OF METAL PRICES.

	Pig iron, No. 1 X.	Bar iron, refined.	Steel rails, ton.	Nails, keg.	Copper, pound.
1884 (lowest)	\$18.00	\$42.56	\$26.64	\$2.00	10½
1885 (present).....	\$18.00	42.56	27.50	2.05	11 1-20

The nominal gain in wheat is due to the extreme limit of its depression in price at one time last year. Considering the size of the crop this year, wheat is relatively lower now than then. The late break of 10c. per bushel will hardly warrant at present the assumption of special strength. Flour hangs on to wheat for its "tendency." Corn is relatively higher than wheat, particularly in the face of a reported heavy yield. Butter and cheese, which six months ago were proportionately higher than other food products, have been suffering a reduction in quotations, and finally find a net decline equivalent to that reported earlier in other lines. Coffee, tea and rice are all lower than at any time last year, and tobacco is no higher. Sugar, owing to the reported decline in the beet-sugar production and to speculative influences, has been advanced. Fresh beef is being sold from 5a.7c. to 8a.10c. and fresh mutton from 3a.5c. to 7a.9c. Sheep here have been sold as low as 2a 2½c. per pound, live weight, within the week. An improvement in raw wool prices, when compared with the lowest last year, is not apparent. That in print cloths is most conspicuous. Flannels are believed to be shaded below the nominal figure given. The reported gain in metals has been too highly colored. Pig iron is unchanged at the lowest prices on record, some varieties going lower than at any time last year. Steel rails have been advanced nominally 50c. or \$1 per ton, on the basis of the intended restriction of production next year. Large buyers can still get former figures, \$27. Since 1885 quotations for rails have dropped to \$26.50, as against \$26.64 at one time in that year. Copper is speculatively higher. Like influences have been felt in tin and lead with varying success.

It appears then that a heavier autumn demand for print cloth, for bleached and brown cottons, for boots and shoes, and for raw wool from eastern manufacturers, constitute the only visible improvement. The coming autumn was expected to bring increased business; it always does. Its arrival in somewhat heavier proportions than looked for is welcome, but it is yet too early to determine the staying qualities of the movement—i. e., whether the general public are increasing the rate of purchase; whether the late period of economizing now enables and suggests to the public a more generous gratification of wants. Thirty days hence, when more of the crops have been gathered and sold, when the farmer knows where he stands financially after his year's work, the traffic returns from eastern manufacturing centers will prove of greater import.

The number of mercantile failures throughout the United States from January 1 to August 12 this year amounted to over 7,900 as compared with 7,132 in a like portion of 1884, with 6,616 in 1883, and with 4,270 in a like share of 1882. But the totals reported weekly have been somewhat below the corresponding figures during July and August in 1884, which may perhaps be regarded as of favorable significance. Within another month, or by October 1, the meaning of the weekly failures reported to Bradstreet's will be much

clearer. While the total number of failures for eight months is 11 per cent. heavier than for eight months of 1884, for July and August they are nearly 10 per cent. less than in the like months last year.

DEFECTS TO WHICH BOILERS ARE MOST LIABLE.

Appended to the monthly inspectors' reports of boilers in the *Locomotive*, of Hartford, Conn., are the following notes of defects: Leakage at tube ends is one of the most frequent and annoying defects to which the ordinary horizontal and upright tubular boilers are subject, and while it is not necessarily, on its first appearance dangerous, it indicates that something is wrong, either in the construction or management of the boiler, and it should be attended to at once, for if neglected, the resulting corrosion of the head and tube ends will speedily induce a dangerous condition. Many explosions of upright tubular boilers have resulted solely from this cause. Faults of construction may consist of insufficient rolling, or too severe rolling or expanding of the tubes; by which the ends may be split, or cracked, so that it is impossible to keep them tight. The second defect is, perhaps, more frequent than the first. The feed-pipe is also very frequently wrongly located in the head close to the tubes, and when it is, and cold feed-water is used, the tubes in the immediate vicinity are almost sure to show a chronic leak. A heavy coating of scale on the heads between the tubes is sure to set them leaking severely, as the water is thus kept away from the head and tube-ends, and they become overheated. In this case the only thing that will do any permanent good is to remove the cause, that is the scale; when generally if the defect has not existed for too long a time, the tubes may be rolled and made tight again. But a comparatively short time of severe leakage in this case is pretty sure to so severely corrode the ends that new tubes are required. This collection of scale is also a fruitful source of burning and cracking of the back tube-sheet. The front end of the boiler is not so much subject to this action, as the heat to which it is subject is not so intense. The removal of a heavy coating of incrustation from between the tubes of a boiler is sometimes a matter of some difficulty unless due intelligence is used. With "staggered" tubes, very bad water, and where the boiler is worked hard, the case is much complicated, and the almost sole reliance is a judicious use of solvents, coupled with proper cleaning, as often as the boiler can be spared for the purpose. With properly arranged tubes, much help can be obtained by the use of proper chisels and scraping tools. Still no rule of procedure can be given that will apply to all cases. A thorough examination of each case is always necessary to determine the best method of procedure, and it is always easier to keep a boiler clean, than it is to clean it after it is badly fouled.

THE largest farm in the world is in Canada. This is the "Bell Farm," belonging to the Qu' Appelle River Farming Company. This farm consists of 54,000 acres, of which some 13,000 acres are under close cultivation. The average yield of the whole 13,000 acres is 25 to 30 bushels of wheat per acre. On one of the best sections of 1,000 acres the yield is 35,000 bushels of wheat. Every 200 acres has upon it a cottage, with a man living in it, rent free, having charge of three horses.

AN HONEST MAN.

"I am going down town," said a citizen on a Woodward avenue car yesterday, "to return a lost wallet to its owner."

Every man in the car pricked up his ears, and one of them moved up closer and inquired:

"You found a wallet, eh?"

"Yes, sir."

"On the street?"

"Yes."

"In the day time?"

"No; at night."

"Anybody see you pick it up?"

"Not a soul."

"And you would have been perfectly safe in keeping it?"

"I would."

"Well, sir, let me shake hands with you. I have wanted to live long enough to find an honest man, and I have found him."

They shook.

Many of the passengers were visibly affected.

"And how much money was in the wallet?" queried the interrogator, after wiping his eyes on a pink-bordered handkerchief.

"Not a blamed cent!"

Then the curtain went down and the audience filed out.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

Situation as head miller by a first-class man, German, long experience, to take charge of a roller mill from 100 bbls. upwards. Can furnish first-class references as to ability and character. Western States preferred. Address, THEO. TEICHGRAEBER, Jefferson City, Mo. 268

SITUATION WANTED.

Wanted a situation as head miller in some good roller mill. Best of reference. Missouri, Kansas, or Illinois preferred. Address E., Box 68, Lexington, Mo. 261

SITUATION WANTED.

By a practical miller who thoroughly understands rolls and stones. Will come on trial and accept position as first or second miller. Address PROGRESS, care of THE MILLING WORLD, Buffalo, N. Y. 2427

SITUATION WANTED.

By an experienced miller. Understands both rolls and millstones. Will come on trial. Will accept position as head or second miller. Address, "GOOD FAITH," care THE MILLING WORLD, Buffalo, N. Y. 197f

WANTED.

A situation as second miller in some good mill, or would run a small mill. Have had 12 years experience, the last five years in roller mills. Have worked in some of the largest mills in St. Louis. Am willing to work for fair wages, providing the situation be steady. Can give good references. Address JAMES McCARTHY, American Hotel, north west corner of Sixth and Morgan streets, St. Louis, Missouri. 1

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word for one insertion, or 3 cents per word, or four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office, 10 cents must be added to pay postage.

MILL PROPERTY FOR SALE.

Any one wishing a first-class mill property would do well to correspond with S. B. PIKE, Murray, N. Y. 221

CUSTOM MILL WANTED.

I wish to rent a good water power custom mill. Address, BOX 22, Seneca Castle, Ontario county, N. Y. 241

FOR SALE.

One of the finest water powers and mill for sale in Kansas. For information write to KINSEY & BROWN, Kingman, Kansas. tf.

FOR SALE OR RENT.

Tide mill, three run burrs, on good terms to right kind of a man. Mill in good order; 30 miles from New York city. Address, C. E. STUDWELL, Greenwich, Conn. 261

FOR SALE.

Valuable grist and saw mill; water power; near railroad; good custom, with fine farm attached. For full particulars, address G. B. WHITE, Woodwardville, Anne Arundel county, Maryland. 2528

FOR SALE.

A good merchant and custom water power mill. Three run and pony. Five miles from Hudson, two and one-half miles from depot. On Kinderhook creek. Terms liberal. Address, J. W. ROSSMAN & SON, Stockport, Columbia county, N. Y. 263

FOR SALE OR RENT OR TAKE PARTNER.

A steam mill, two run of stones; mill in good working order and doing a paying business in town of 3,000 people; three railroads and finest farming lands of Illinois. For further information address "F," care of THE MILLING WORLD, Buffalo, N. Y. 252

FOR SALE AT A BARGAIN.

Any one wishing a new, first-class 50-barrel stone mill—the only mill in the thriving city of Salisbury, N. C.—will do well to apply for particulars to P. M. BROWN, Salisbury, North Carolina. 14

FOR SALE OR EXCHANGE.

A fine improved farm in Central Illinois, also one in Pulaski county, Indiana. For sale cheap for cash, stocks of goods, or western lands. Address, T. J. CAIRNS & CO., Janesville, Wisconsin. 111

SMITH'S PATENT
BELT FASTENERS

Are positively unequalled for fastening LEATHER, RUBBER or COTTON BELTING.

THE ONLY FASTENER that will run under tighteners, on patent rolls in flour mills, and Electric Light Machines.

EASIER TO APPLY THAN LACINGS AND FAR MORE ECONOMICAL.

Pat. Sept. 20, '81; Aug. 15, '82; June 16, '84.

PRICE LIST.

No. 1. For large drive belts, per box of 100.....	\$2.00
No. 2. For Cotton " " 100.....	1.75
No. 3. For Rubber " " 100.....	1.50
No. 4. For single Leather belts, per box.....	1.25
Combination Punch with guides and nippers.....	1.25
Reamers for taking fasteners out.....	0.35

TRY THEM! They will save you loss of TIME, TEMPER and MONEY. Manufactured by

H. D. EDWARDS & CO., 16, 18 & 20 Woodward Ave., DETROIT, MICH.

Manufacturers of Oak Leather Belting, Agents for J. B. Hoyt & Co., N. Y. Belting & Packing Co., Eureka Fire Hose Co., Cotton Belting Mill Supplies.

EXECUTOR'S SALE.

The Heirs wish me to sell the Oceana Mills, located at Hart, Oceana county, Michigan. One of the finest and best built mills in the State. First-class water power; plenty of land; good business; terms easy. On Chicago & West Michigan R. R., near Lake Michigan and Harbor. Come and see it, or write for particulars. W. M. WIGTON, Executor, Hart, Mich. 268

WANTED—MANAGING PARTNER.

In 200 bbl. roller mill. Mill has abundant water power, established trade, popular brands, always sold ahead. I will make favorable arrangements with a partner who will furnish working capital, and give management to one who is a practical miller. Address for particulars, OWNER, Box 411, Minneapolis. 225

TWO WATER GRIST MILLS FOR SALE.

Either one of which, together with the surroundings, will make a splendid property for any go-ahead, worthy, miller, or for any person who wants to make investments better than in gold mines. The reason for selling is the old age of the proprietor. All inquiries answered when accompanied by a postage stamp. Address, F. A. STRONG, Colebrook, Wis. 283

BARGAINS! BARGAINS!

We have the following machinery, brand new, direct from the manufacturers, first class and well-known makers, perfect in every particular, which we will sell very cheap for want of use:

- Two 20-inch, under runner, portable mills for corn, feed, wheat and middlings.
- Two 20-inch, iron frame, middlings mills.
- Two Combined Separators, Smutters and Brush Machines.
- One Corn Cob Crusher.

The above mills have old stock French burr stones of best quality. The entire lot of machinery is A1. If you want bargains and are prepared to pay cash write us for particulars. Address, DENTON & CO., care The Milling World, Buffalo, N. Y.

NO SPECKS; NO GLAZING OR HEATING.

TO STONE MILLERS.

Brother Dusties: If you will send me your address, and enclose \$1.00, I will tell you how to make as good white and strong flour, as close a yield, and as little low grade, with as clean bran, as by any system of milling known. Do not make costly changes until you have tried it; you will be greatly surprised and benefitted. You need not injure your burrs or machinery to give it a trial. Just the thing for either hard or soft wheat. This is no catch-penny scheme, but a positive fact, guaranteed by a practical miller, who has had years of experience. Address plainly, D. R. SCHENCK, Nemaha City, Nemaha county, Neb. 241

FOR SALE.

One five foot Vanderventer Turbine Water Wheel with six inch shaft, eighteen feet long. All in good condition; must be disposed of within fifteen days, regardless of cost. Address, H. S. WARE, Niagara Falls, N. Y.

SPECIAL NOTICES.

HOW DOES THIS SUIT?

"Cooch's Bridge, Del., Aug. 25, '84.

"Messrs. Thompson & Campbell, Philadelphia, Pa.

"Gentlemen: Your machine was sent here against an —, on condition that we should keep the best, and we tried each machine, and are frank to say that if your machine cost us \$500 and the other was offered us as a present we should take yours, as we cannot find a fault with it. The above machine has a capacity of 50 bushels per hour."

We think best not to publish name, but it will be given upon application. Address, THOMPSON & CAMPBELL, Philadelphia, Pa.

BOLTING CLOTH.

Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

CASE MANUFACTURING CO., Columbus, Ohio.

Office and Factory, 5th Street, north of Naughton.

WIRES

Bolting Cloth

STEEL, BRASS AND PLADET.

ALSO

Bran Duster Cloth

MANUFACTURED BY

NATIONAL

WIRE AND IRON CO.

DETROIT, MICH.

Wire Cloth Bolts made up in First-Class Manner. Write for Prices before ordering elsewhere.

GENUINE FRENCH BUHR CORN and FEED MILLS and POWER CORN SHELLERS. Cheapest and Best in the world. Illustrated circular free. A. W. STEVENS & SON, Auburn, N. Y. Mention this paper.

The Best Conveyor Flights

and Cogs. The Best ELEVATOR CUPS

Bolts, Cotton & Rubber Belting, Best Power Corn Sheller at lowest prices. Send for Circular.

A. H. FAIRCHILD & SON, North Bloomfield, Ont. Co., N. Y.

September 7, 1885.

THE MILLING WORLD.

ODELL'S CELEBRATED ROLLER MILLING SYSTEM!

Can have no stronger endorsement than the fact that it has been adopted in THE NEW MILL OF THE CENTRAL MILLING Co., at NIAGARA FALLS, N.Y., which is the Largest Complete Roller Mill Plant in the World Now Under Process of Erection, a complete line of the Celebrated Odell Rolls also being used. There is no question as to the success of the Odell System. It is acknowledged by intelligent and experienced millers who have compared it with other systems to be

| PAR EXCELLENCE |

and it is most admirably adapted to the requirements of both Large and Small Mills. Mr. Odell has given much study to the needs of Small Mills, and has developed a complete and perfect system for establishments ranging in capacity from 30 to 75 barrels per day, and permitting their erection or remodeling, at Greatly Reduced Cost. We take great satisfaction in referring to the large number of mills in successful and profitable operation in all sections, Built and Equipped by Us. We invite correspondence, will furnish full information on request, and will send our experts to consult to any part of the country.

STILWELL & BIERCE MFG. CO., DAYTON, O.

MANUFACTURERS OF
ODELL'S ROLLER MILLS
And Flour Mill Machinery.

NIAGARA'S MILLS.

IN the *Niagara Falls Gazette* "A. H. P." writes as follows of the old mills so long and so well known there, which have been swept away by the resistless tide of public improvement: The first use of water power at Niagara Falls was made in 1805-7, and the first grist mill erected in 1807. From 1805 to the passage of the act authorizing a State park, the free use and undisputed right to the water power had never been questioned. But under the ruling of the State appraisers the occupants are regarded as trespassers, although the title to the water power had never been previously claimed by the State, even where the occupation had been continued for more than 40 years. Now after nearly 80 years of private, undisturbed possession of the water power the claim has been made in behalf of the State. This view involves the legal title of the State, still pending in the courts. In this respect the claim of the first owners of water power is analogous to that of the Indians, who are required to move on when their lands are wanted.

The first grist mill was built in 1807, and until 1813, when it was destroyed by the British, was the only permanent mill in this part of the country for the use of the inhabitants and the partial supply of the army. It was a two story building, with two runs of stones, fully equal to the requirements of the day. On the conclusion of the war in 1815, after the destruction by the enemy of the mills and all other property along the frontier the work of restoration began. The second mill was erected in 1815 on the original site, with two runs of mill stones, and was occupied as a grist mill until a larger one was required, and built near the same place. The second mill with an additional building was occupied for several years as a carding, cloth dressing, and manufacturing establishment. In 1822 the third mill was built with four runs of stones and completed with all the improvements adopted at that time by the best mills in Rochester. It was provided with burr mill stones, and all labor-saving machinery required for the manufacture of superfine flour. The various operations were as follows: The wheat was first received into the hopper scale to be weighed and discharged into a bin in the basement, then elevated to the attic, where it passed through screens, fanning-mill, and smut machine, and when thoroughly cleaned passed down to the second story. From there it descended to the mill stones, was ground and again elevated to the cooling floor in the attic, when being thoroughly stirred it was discharged into the bolts and then into the flour bin and packing-room, where the flour was packed in barrels and marked, ready for delivery. After the opening of the Erie canal and the supply of water power at Black Rock and Lockport the manufacture of flour at the Falls was necessarily

restricted. But the old mills at Niagara were among the earliest and best of their day and long remained to mark the progress of improvement and encourage enterprise.

A MEMBER of a prominent milling firm in Milwaukee having returned from a visit to Great Britain, stated to a reporter: "The wheat crop in Great Britain is 1,000,000 quarters short, on account of decreased acreage. The English market is waiting for the American market to advance, just as the American market seems to be waiting for the English market to do the same thing. One thing I noticed, and that is that the English market is very much dependent on the weather. If the weather is fine in London, as it is here today, prices go down, and if it is rainy the market goes up. The reason of this is that on pleasant days the deliveries are large, and on unpleasant days they are small. In flour, there is little demand for spot property, but for future deliveries there is considerable inquiry."

THE EUREKA ALWAYS AHEAD.

We have information from our manager in London, that the Eureka Grain Cleaning Machinery exhibited at the Millers' and Bakers' Exposition, at Paris, France, was granted the highest award—the diploma of honor. This is the only award of this class granted any American or English manufacturers for grain cleaning machinery, or in fact anything else. If any one is inclined to doubt this statement, we have the official list of the awards. In connection with this statement, it will not be out of place to say, that wherever the Eureka Grain Cleaning Machinery has been on exhibition, with a view of premium, it has always carried off the first prize, to wit: The special gold medal at Manchester, England; medal for progress, at Vienna, Austria; first premiums at Buffalo, Atlanta, Pittsburgh, and various other places where it has been exhibited by others than ourselves. This is significant, and we now state without fear of successful contradiction, that there are more Eurekas in use for cleaning grain at this time, than a similar machine of any other two manufacturers in the United States, or we might say of all other manufacturers combined. We have lately made important improvements in our machines, and ask all our old friends and patrons to write us before purchasing elsewhere. HOWES & EWELL, Silver Creek, N. Y.

A BARGAIN.

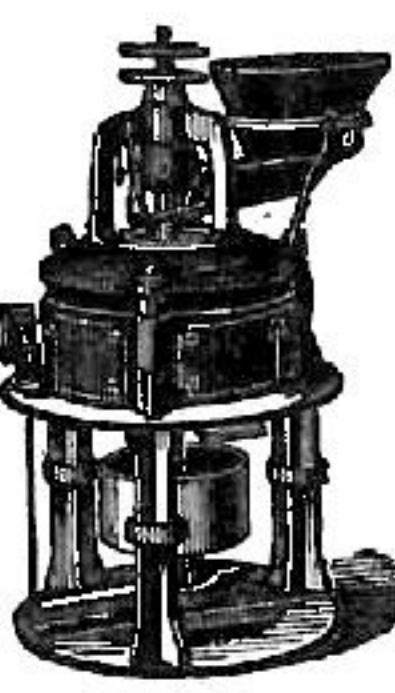
Valuable Mill Property For Sale.

Situated in a small village on a line of Railroad, in a good wheat country, twelve miles from New York Central Railroad, and six miles from Seneca Lake. The mill has been built two years, and is supplied with first-class machinery for Roller Milling, built by the Jno. T. Noye Mfg. Co. 50-Horse Power Engine and Boiler with small Circular Saw Mill attached. Property also includes six acres of land, with sheds and small Wood-Working Shop. Must be sold within the next few weeks. For full particulars, terms etc., address WATERTOWN STEAM ENGINE CO., Watertown, N. Y. tf.

Buckwheat Refiners & Portable Mills



BREWSTER'S CELEBRATED
Buckwheat Refiner
Is the only machine
whereby the greatest
yields of
**PURE, WHITE
SHARP FLOUR**
can be obtained.
The only reliable, practical
and durable ma-
chine
IN THE WORLD.



THE POSITIVE ADJUSTMENT
AND AUTOMATIC
MIDDINGS MILL
Is Strictly Self-Protecting
The Best Adjustment in
the World.
And the only
Perfect Granulator
Grinds Cool, Self-Oiling, Great
Saving of Power.
Simplicity and Durabil-
ity Combined.

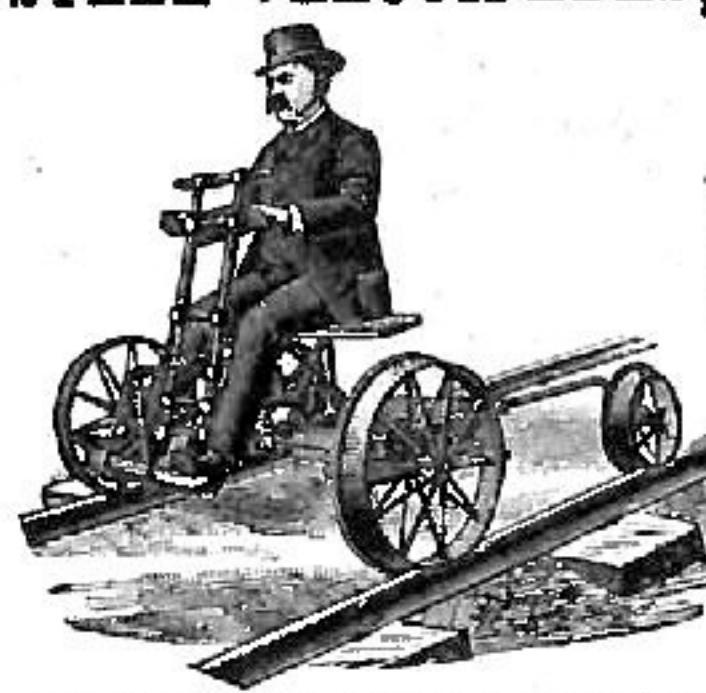
Satisfaction Guaranteed on all our Goods. Send for Descriptive Circular, giving Prices, Sizes, Terms, etc.

BREWSTER BROS. & CO. Unadilla, N. Y.

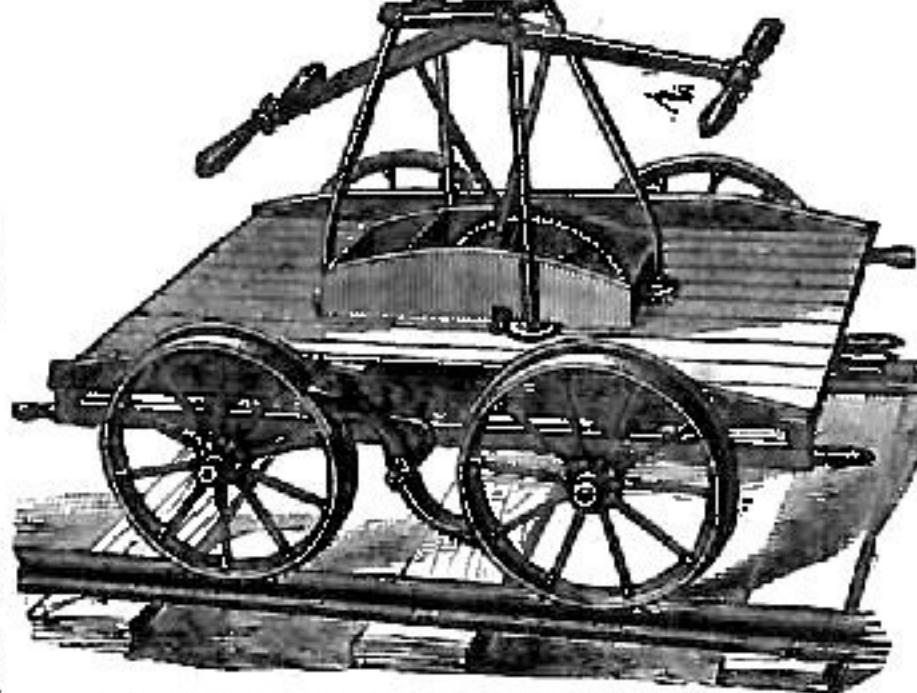
KALAMAZOO R. R. VELOCIPEDCO.

KALAMAZOO, MICH., MANUFACTURERS OF
STEEL VELOCIPEDES, SECTION, TELEGRAPH,
AND INSPECTION

HAND CARS.



STEEL VELOCIPED—Weighs
185 lbs. Carries either one or two
men. We guarantee it to be the
Lightest, Safest, Speediest and
Most Durable Car made.



AWARDED GOLD MEDAL.

Send for Illustrated Circular and Testimonials.



This Wheel gives high results, and is acknowledged the best, most practical and efficient Turbine made. For Simplicity, Durability, and Tightness of Gate it has no equal.

State requirements and send for Catalogue to
T. C. ALCOTT & SON,
MOUNT HOLLY, N. J.

NEW DEPARTURE

ROLLER CORN MEAL MILLING!

We are building a Large Number of mills for making Roller Corn Meal and in every instance the enterprise has proven a success.

READ THE FOLLOWING LETTER FROM ONE OF OUR CUSTOMERS:

CASE MANUFACTURING CO., COLUMBUS, OHIO.

LAWRENCE, KAN., Aug. 21, 1885.

Dear Sirs: We having had a number of years' experience as Millwrights, Milling Engineers and Mill Contractors, and as we made roller mill building a specialty, we took special care to acquaint ourselves with the merits of all the popular makes of rolls on the market, and having been so far successful in our business of mill building as to make and save up some money, we last August decided to invest it in a Roller Corn Mill, and without any hesitancy decided to adopt your six inch rolls with your automatic feed, and ordered two pairs 6x12, and three pairs 6x18, designing to build a mill of 100 barrels capacity. And now, after a ten month's run, we would say we are satisfied, and very much pleased with the quality and the amount of work the rolls are doing. With the five pairs of small rolls we are easily making 100 barrels of choice fine meal per day, and on one occasion we made 65 barrels in ten hours. We use a very small amount of power, and it is conceded by all who have handled our meal that it is as much (some say more) superior to stone-ground meal as roller flour is to buhr made flour. We are now making three grades of meal, which find a ready sale in New Orleans—one house wanting our entire product at from 25 to 50 cents per barrel above choice St. Louis meal. Had we other corn mills to build, we should certainly put a line of your rolls, with automatic feed, in each of them. Wishing you abundant success in manufacturing and furnishing choice mill machinery, we are,

Yours, etc.,

H. C. SMITH & SON.

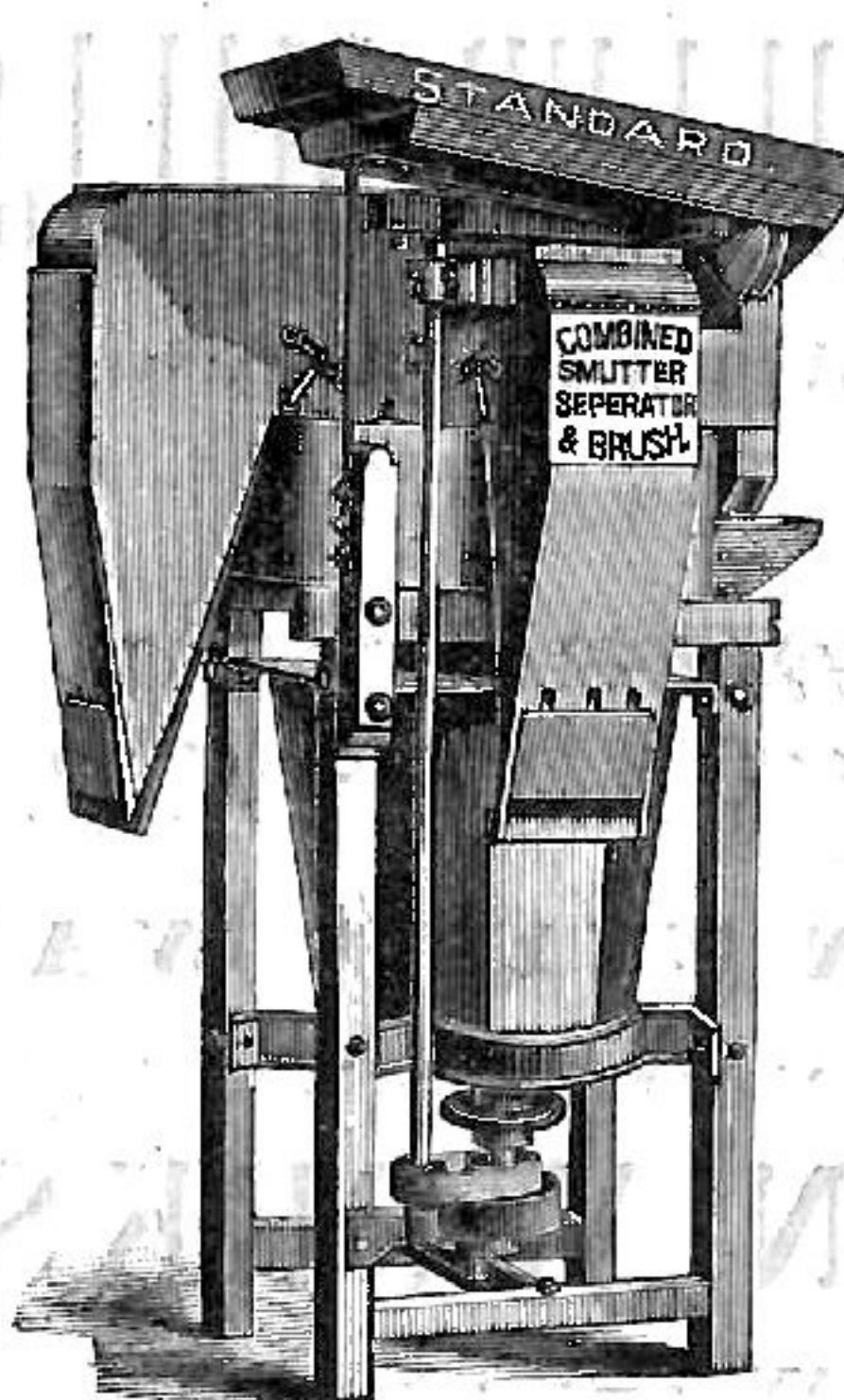
For Low Estimates on Complete Plant for Making Corn Meal or Flour, or for a Single Machine, Address,

THE CASE MFG. CO., COLUMBUS, O.

TOOL FOR CUTTING, LEVELING & POLISHING THE FURROWS & FACE OF MILLSTONES

Eight inches long, 2 1-2 inches wide, 1 1-2 inches thick. Received the highest and ONLY AWARD GIVEN TO POLISHERS at the Millers' Exhibition, Cincinnati, Ohio, June, 1880. For facing down high places on the buhr this tool has no equal, and can be done much better and in one-sixth the time than with the mill pick. It is much larger, cuts better, can be used on either face or furrow, can be used until the corundum is entirely worn out on one side, and then turned on the other side. Has over four times the amount of corundum, and when the corundum is worn out can be replaced in the handle at a small cost. Sent by express, \$3.50. Satisfaction guaranteed, or money refunded. Address,

HORACE DEAL, - - BUCYRUS, OHIO.



The "Standard" Grain Cleaning Machinery

WOULD HAVE SAVED \$500 OF CUSTOM.

THE EDMANDS MFG. CO., HAMILTON, OHIO

THIRNER, O., Aug. 10, 1885.

Gentlemen: The Combined Separator, Smutter and Brush Machine we bought of you can't beat. You would be surprised to see the difference in our flour. Had we put it in one year ago we would have saved \$500 of custom. We have got a —— machine to sell cheap. Yours respectfully,

J. & H. PLYMALE.

These Machines are built in Sizes Suitable for Mills of Any Capacity. Every Machine Guaranteed. Send for Catalogue and Reduced Prices to



THE EDMANDS MFG. CO.

NO. 4 HIGH STREET, HAMILTON, OHIO.

A NOVEL GRAIN ELEVATOR.

ACCORDING to the "Express" of this city, there is an unusual interest manifested by marine men generally in the new transfer elevator building at Cleveland for use in Buffalo Harbor. There seems to be a pretty general notion that it is going to revolutionize the business, and the peculiar condition of the elevating branch of the lake trade here serves but to add to the interest that would naturally be felt in an innovation that promises to upset all existing styles of handling grain. "I tell you candidly," said a gentleman, "that this new elevator is going to knock the old way of elevating straight from the word go into the middle of next week, and I know what I am talking about, too."

The building of the concern at Cleveland instead of here may seem queer to those who do not know the inside history of the invention, and something by the way of explanation is in order. The invention is known as Smith's pneumatic system for elevating grain. It is the life work of Mr. Lyman Smith, of Kansas City, and really seems to be a successive solution of the long-tried problem of elevating grain by a current of air. After completing his invention to his satisfaction Mr. Smith first used it for unloading cars, and it worked so well that he came to Buffalo last spring and sought to dispose of an interest in it in order to get it introduced in the harbor. He laid the matter before Messrs. A. P. Wright & Son, who, as extensive receivers of grain ought to be interested in such an invention if anybody was. They were so thoroughly interested that Mr. A. J. Wright went to Detroit to see it work.

"I made a thorough examination of it," said Mr. Wright to a reporter. "It was set up in the Michigan Central car shop, and so far as it was tested in elevating grain from cars it was a complete success. From my observation I can see no reason why it will not work in transferring grain from vessels. It is an adaptation of the old principle of pneumatic elevation which has been tried a thousand times, but which has always failed until now. The great trouble with the utilization of the principle has been in the management of the current of air that does the work, but Smith seems to have succeeded.

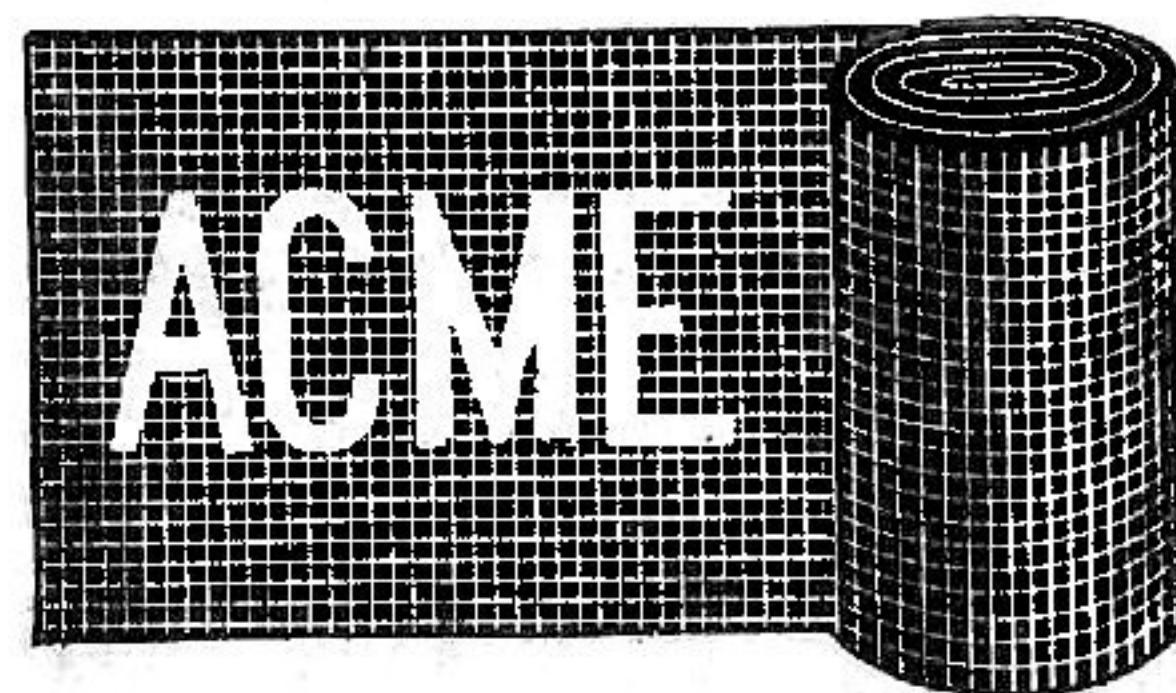
"I don't want to try to explain the invention, but it is really the lifting of grain through an iron tube by a current of air by means of a common blower." Now, you may put a tube into a pile of grain and you can't raise a kernel of it with the best blower in the

world. The secret seems to be in introducing it into the grain in the pile. This machine would not only elevate grain at a surprisingly rapid rate, but it would take up coal, or a keg of nails even, just as easy as anything, and it would work on fine stuff like bran. I am confident that it is a success."

But though Mr. Wright was tolerable certain that the invention would work, he did not come to an understanding with Mr. Smith. Like all inventors who have worked over a pet idea until it has fairly taken possession of him, Mr. Smith was very nervous over the prospect of losing any share of the control of his invention. He was afraid somebody would try to take advantage of him, and so he left Buffalo without disposing of any part of his patent. Before leaving here, in fact before coming here, he had made his invention known to Capt. Williams, a Cleveland engineer, who finally succeeded in obtaining the contract for building the first transfer elevator of the new pattern. Its appearance here will be awaited with interest.

THE *Locomotive*, (which chronicles the experience of the Hartford Boiler Inspection and Insurance Company) in its July issue, under the heading of "Crystallization of Iron" points out, that if a boiler be well made, of good material and properly cared for, there need be no fear of its becoming unsafe through molecular change in the plates during the ordinary life-time of the boiler. Any such change it attributes to over-heating of originally bad material, or of good material when the scale or sediment deposited by the feed water is not properly cleaned out. In the same issue, the *Locomotive* illustrates a properly designed arrangement of steam connections for a battery of boilers, so that the effects of expansion, and any settling of the boilers after they have run a short time will not cause rupture. It advocates the use of wrought iron pipes, as in every way better than cast-iron. The plan illustrated shows vertical risers, not less than three feet high, attached to the nozzles by means of flanges, and from the upper ends of these risers, pipes are led horizontally backwards into the main steam pipe, which runs parallel to the plane of the risers. In the horizontal pipes connecting the risers and main steam pipe, the stop-valves, one to each boiler, are placed, and these have flanged ends, so that they may, when necessary, be easily removed, without disturbing any other portion of the piping. By this arrangement the spring of the pipes will compensate for any movement of the boilers.

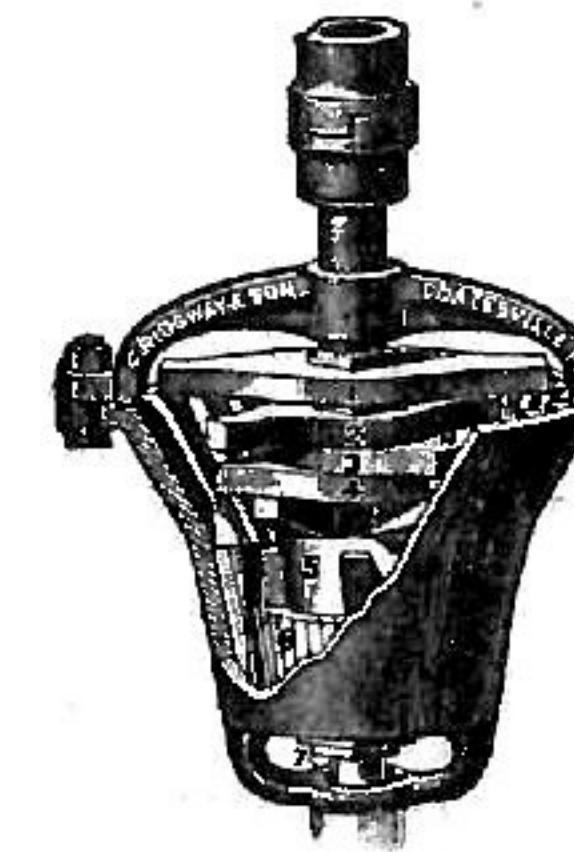
WIRE BOLTING CLOTH—STEEL, BRASS AND TINNED.



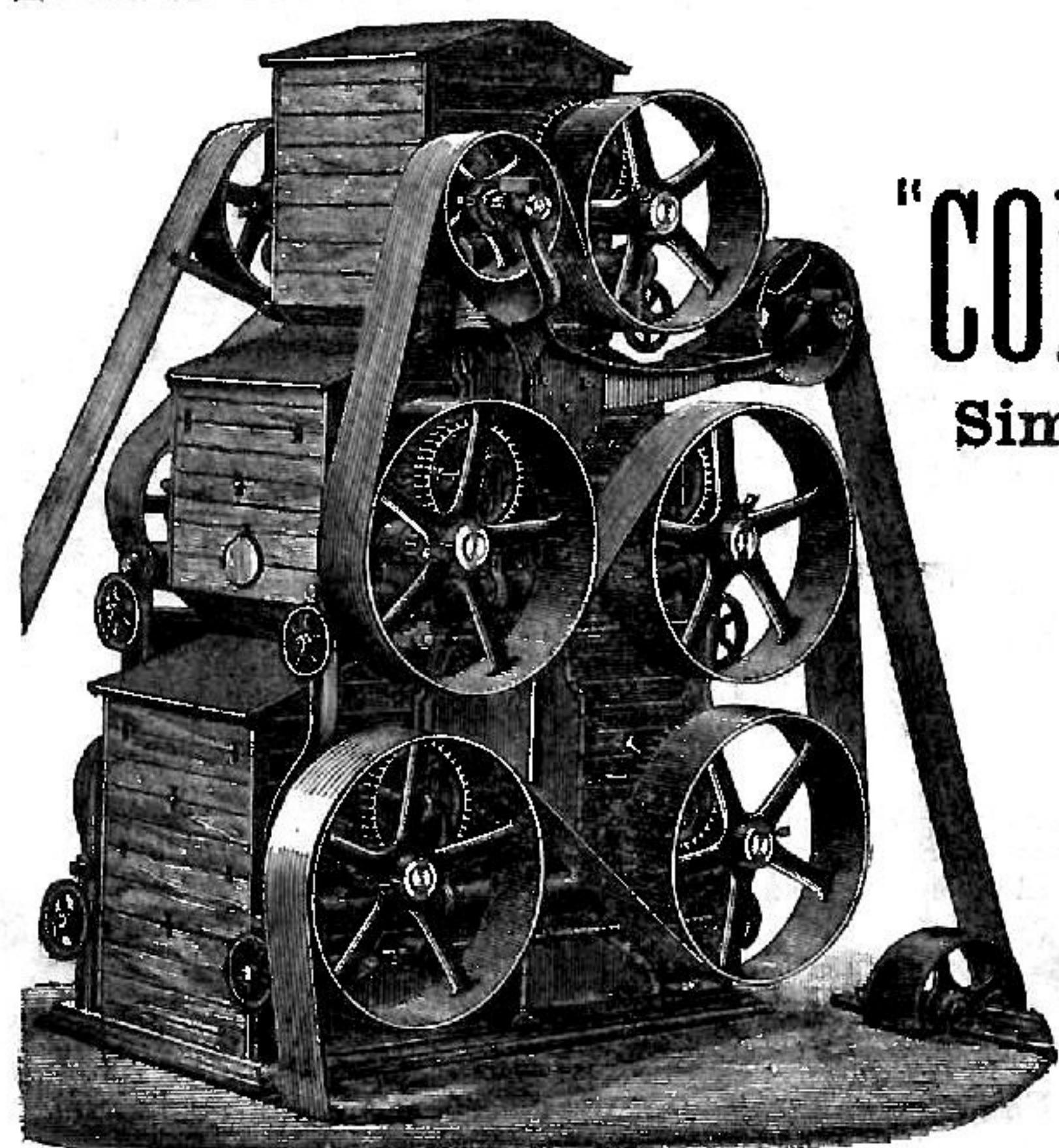
—[ESTABLISHED 1844]—
Exclusive Manufacturers of the
**"ACME" STEEL TEMPERED
BATTERY & BOLTING WIRE-CLOTH.**

Also manufacturers of Bran Duster Cloth, Plated Wire Mill Screen Cloth, Smit Cloth, Brass and Copper Wire-Cloth. A full line constantly on hand. Send for samples and price lists.

Brooklyn Wire Cloth Works,
NO. 107 JOHN STREET, NEW YORK.



**BEST
Cob Crusher
CHEAP AND GOOD.
OVER 2,000 IN USE**
Requires only half a horse power to work it. Send for Circular.
**C. Ridgway & Son
80 MAIN ST.,
COATESVILLE, - PA.**



**O. A. BYRN'S
"COMMON SENSE" ROLLER MILLS**
Simple, Durable, Economical, Light Running.

**PERFECT IN CONSTRUCTION,
PERFECT IN ADJUSTMENT,
PERFECT IN OPERATION.**

COMMON SENSE IN EVERY WAY
WRITE FOR OUR NEW CATALOGUE 10.
VALLEY IRON WORKS,
APPLETON, - WISCONSIN.

THE SILVER CREEK CENTRIFUGAL BOLTING SYSTEM

(A SUCCESS)

How many times have you heard of this, that or the other mill as about to be built, or changed over, so as to operate upon the full system of centrifugal bolting? A good many times, haven't you? Well how many mills do you know that are in successful operation under that system? Not one, do you? The fact of the matter is that so many of these announcements have been made, and so invariably have the results been unsatisfactory, that it has come to be generally accepted that no system of full bolting by centrifugals could be successfully devised. *We have overcome every defect in and every objection to bolting by centrifugal reels.* We have done this without bombastic announcements, or preliminary blow as to our intentions, preferring to be in position to prove our assertions and give evidence of our success before asking attention to our perfected system.

READ THIS LETTER.

Office Hungarian Roller Mill Co., Bloomington, Ill., July 2, 1885.

AUG. HEINE, Silver Creek, N. Y.

DEAR SIR: With your kind permission we take pleasure in expressing our opinion of your SILVER CREEK CENTRIFUGAL REELS and SILVER CREEK DOUBLE SCALPERS. Before building our new "Crown Roller Mill" we carefully investigated all centrifugal reels known to us, and after mature deliberation concluded to adopt the Silver Creek Double Scalpers and the Silver Creek Centrifugal Reels, and we are pleased to say ours was a wise selection. THEY HAVE PROVED SATISFACTORY IN EVERY RESPECT. A COMPLETE SUCCESS. They are certainly the Acme of Perfection in their classes of machines. Our new mill has been in operation for two months, running day and night, and the separations are truly wonderful, making a CLEAR SHARP FLOUR, and close yield, and we are producing a flour superior to anything we know of on both spring and winter wheats.

Yours truly,

GEO. H. COX, Prop.

A. G. DIEBOLD, Head Miller.

All the mills furnished with our machinery are built with the object of making money by MILLING, and our machines have been selected as best adapted for that purpose.

All the mills furnished with our machinery are built with the object of making money by MILLING, and our machines have been selected as best adapted for that purpose.

The above letter was not asked for, or in any manner solicited, by us. This mill is a full roller mill, and has a daily capacity of 250 barrels of flour. The bolting is ALL done upon the Silver Creek Centrifugal Reels, preceded by the Silver Creek Double Scalpers; the entire bolting outfit consisting of six No. 3 Silver Creek Double Scalpers and fifteen No. 4 Silver Creek Centrifugal Reels. The mill has been in operation day and night for two months, thus demonstrating, in the most conclusive manner, the entire success of

THE SILVER CREEK SYSTEM OF CENTRIFUGAL BOLTING.

We have also in operation upon the centrifugal system a full buhr mill, that has been running for almost a year, with entire success and satisfaction to the owners. The success of this system, while dependent upon the unapproachable perfect operation of the Silver Creek Centrifugal Reel, is primarily due to the employment of the Silver Creek Double Scalpers, ahead of them. By the use of these machines excessive handling of the products is avoided; impurities are at once eliminated as reductions proceed, and the material is delivered to the centrifugal reels in most excellent condition for bolting. PLEASE NOTE—The Crown Roller Mills are, and have been, making a *clear, sharp flour*. You can do the same. Correspond with us and we will take pleasure in telling you how, and bear in mind that WE GUARANTEE RESULTS.

**AUG. HEINE, PROPRIETOR
Excelsior Works, SILVER CREEK, N. Y.**

**THE EXCELSIOR IRON CLAD BRAN DUSTER IS USED AND ENDORSED BY THE CROWN
ROLLER MILLS AND BY EVERYBODY ELSE.**

GOSSIP OF THE TRADE.

At Carlyle, Ill., Aug. 29, the Robinson flouring mill was burned. Loss, \$10,000; no insurance.

At Vinton, O., Aug. 28, fire destroyed the flouring mill of the Vinton Mill Co. Loss, \$28,000; insured for \$20,000.

A new elevator is being built and a new station is to be established at Milford, Wis., on the Winona & St. Peter railway, between New Ulm and Sleepy Eye.

Mayor J. E. Wisner, of Lisbon, Dakota, fell from a bridge at his mill, twelve miles north of town, striking on a pile of stone, and injuring himself seriously, but not dangerously.

Indians at Devil's Lake Agency, Dakota, have raised 60,000 bushels of wheat this season. The wheat will be manufactured into flour at the agency mill and turned over to the government at \$2 per hundred.

The flouring mill at Gladstone, Dak., is nearly completed. Its walls are of a fine quality of Dakota sandstone, and the machinery will include twelve pair of rolls. The capacity of the mill will be 75 barrels per day.

The Northern Pacific elevators at various places in the vicinity of Fargo have taken in about 75,000 bushels of new wheat, most of which graded No. 1 hard. The indications show a good quality, but a lighter yield than was expected.

In Walla Walla Valley, Ore., may be seen eighty miles of continuous wheat fields along the foot-hills of the Blue Mountains. The farmers continue to grow wheat, though they have to pay 30 cents per hundred pounds to get it to market.

At Wellsville, Mo., Aug. 30, J. H. Rheades' flouring mill and elevator was destroyed by fire. The fire started in the upper story of the mill, and is supposed to have been caused by the spontaneous combustion of mill dust. The loss is about \$9,000, and the insurance only \$3,000.

Mr. J. B. Swan, of Rapidan, Minn., has sold a half interest in the Rapidan Mill Company, to Mr. Baker, head miller of the St. Peter mill, for \$7,700. The sale includes Mr. Swan's pleasant residence and property at Rapidan. Mr. S. has been constantly engaged in active business for about twenty years, and he thinks he has earned a brief respite, which he will spend in visiting friends. Mr. Baker is an excellent miller, and will maintain the well-earned reputation of the Rapidan Company.

Mr. Geo. G. S. Campbell, of Alexandria, Minn., has contracted with the Pray Manufacturing Co., of Minneapolis, to put into the Alexandria Mills six double sets of 9x24 Livingston Rolls, with all the necessary machinery for a complete roller system, with a daily capacity of two hundred barrels. For this purpose the mills will be closed from September 1st until November 1st. This will put these mills upon an equal footing with the best in the State and will be a great benefit to the town and country.

The trouble with the flour market, at St. Louis, Mo., is said to be almost entirely due to railroad freight rates. There was a time when the people of a large section of country had no other market, and made all their purchases in St. Louis, but that time has passed, and unjust freight rates have enabled other milling points located much further from the trade to go in and do the

business. The quality of St. Louis flour is such that her millers fear no competition if placed on an equal footing with others, or even at only a slight disadvantage, but they can not withstand such enormous advantages as have been given others.

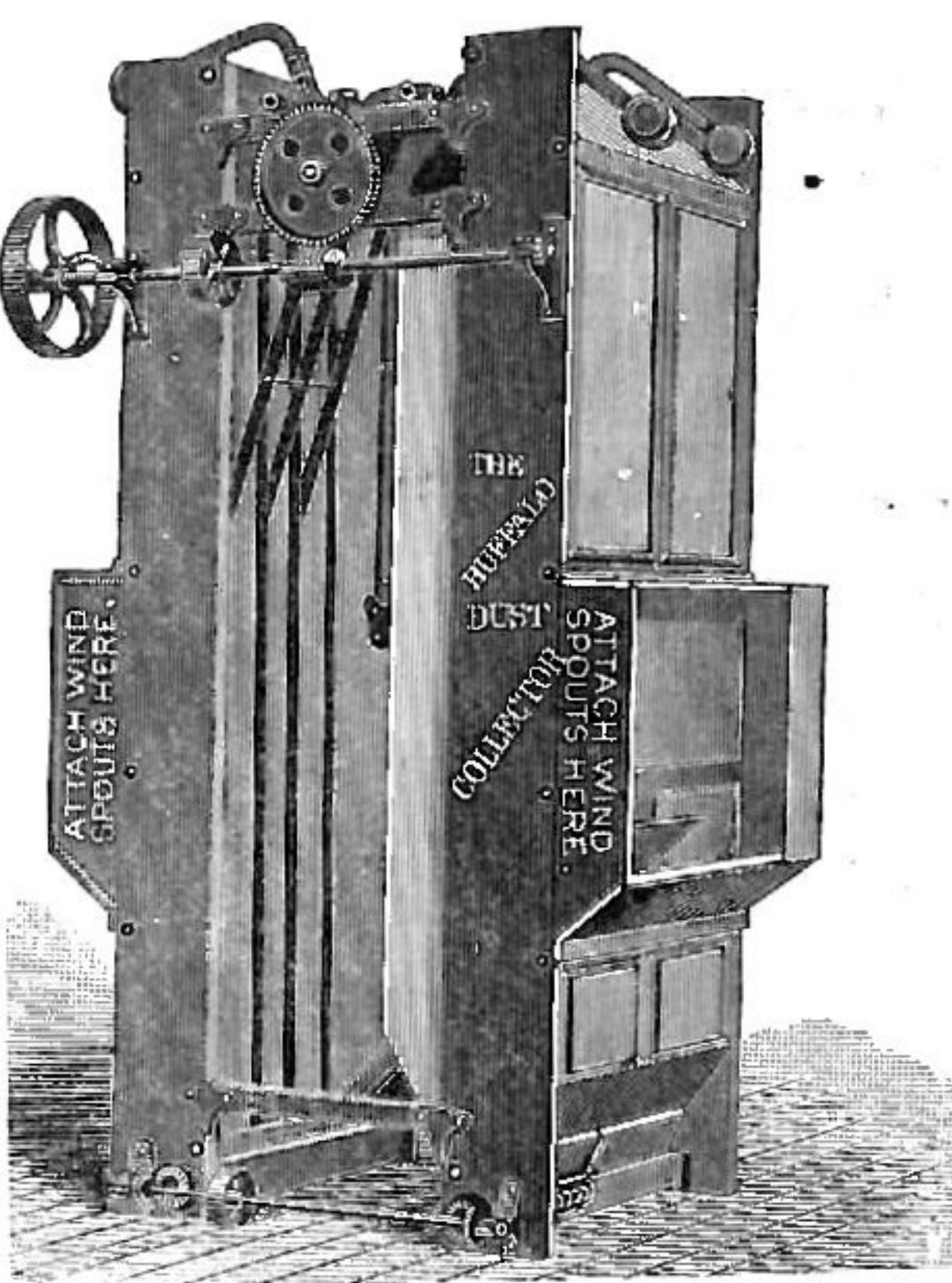
When a millowner has acquired a prescriptive right to keep up a dam constantly, which in its usual operation would raise the water to a certain height, although from the leaky condition of the dam or the rude construction of the machinery of his mill, or the lavish use of the stream, the water has not been usually and constantly kept up to such height, yet if he repair the dam, without so changing it as to raise the water higher than the old dam when tight would raise it, or if he use the water in a different manner and thereby keep up the water more constantly than before, this is not a new use of the stream for which a landowner can claim damages, but is a use conformable to the millowner's prescriptive right.

About 10 o'clock last Monday night, the extensive flour mills of Heinold, Rodenbaugh & Co., known as the Lancaster Roller Mills, in Lancaster, N. Y., took fire, and were entirely destroyed. The cause of the fire is unknown. It was first discovered shooting up the elevator shaft, and the structure burned very quickly, making a great blaze, which was visible for miles. The mill was valued at \$30,000, and was insured for \$20,000. The mills had a capacity of 125 barrels per day, and were overhauled and improved a short time ago. There was considerable stock on hand at the time of the fire, all of which was lost. The building was located a short distance outside the village of Lancaster, and the fire did not extend to surrounding property.

What do Buffalo grain tallymen think of the following from the *Port Huron Times*: "The propellor Northerner on her last trip to Buffalo took 10,000 bushels of wheat from Port Huron and 6,000 bushels of corn from Detroit. When she discharged her cargo at Buffalo it was found that her shortage not only absorbed all her freight money, but ran the boat in debt to the amount of \$16, which the captain paid. Several boats have been recently loaded at the Sanborn elevator in this city, and upon their arrival in Buffalo a large shortage has been claimed. To satisfy himself as to the reliability of his scales, Mr. Sanborn sent for an expert to test them. On Saturday a representative of the Howe Scale manufactory examined the scales and found them all right. Mr. Sanborn is positive that no mistake has been made at this end of the route, and says that it is a notorious fact that weighers at Buffalo often offer to weigh a cargo for the surplus grain. Port Huron elevator men are anxious to have an investigation held."

The Cummer Engine Co., of Cleveland, O., has recently received the following orders for engines: A 55-horse power engine for the Torrington Mfg. Co., of Torrington, Conn.; 130-horse power engine for the Baker Wire Co., of Des Moines, Ia.; one of 55-horse power for the Journal Co., of Kansas City, Mo.; one of the same size for the Kansas City *Times*, also Kansas City; a 67-horse power engine for the Sikes Chair Co., of Buffalo, N. Y., and one of 89-horse power for F. Baer, Greensburgh, Pa. The Cummer Co. is also selling a great many of the Jonathan Mills Universal flour dressers, which are being extensively adopted for the entire bolting in new mills. They have lately received orders for a full line of these reels for a new mill in California, one in Kansas, two in New York, and one in Pennsylvania. A number of mills have started with these reels for all the bolting, and report the best of results. They say they are receiving nothing but praise from the reels everywhere, and that the trade on them is constantly increasing.

THE BUFFALO DUST COLLECTOR, MANUFACTURED EXCLUSIVELY BY US.

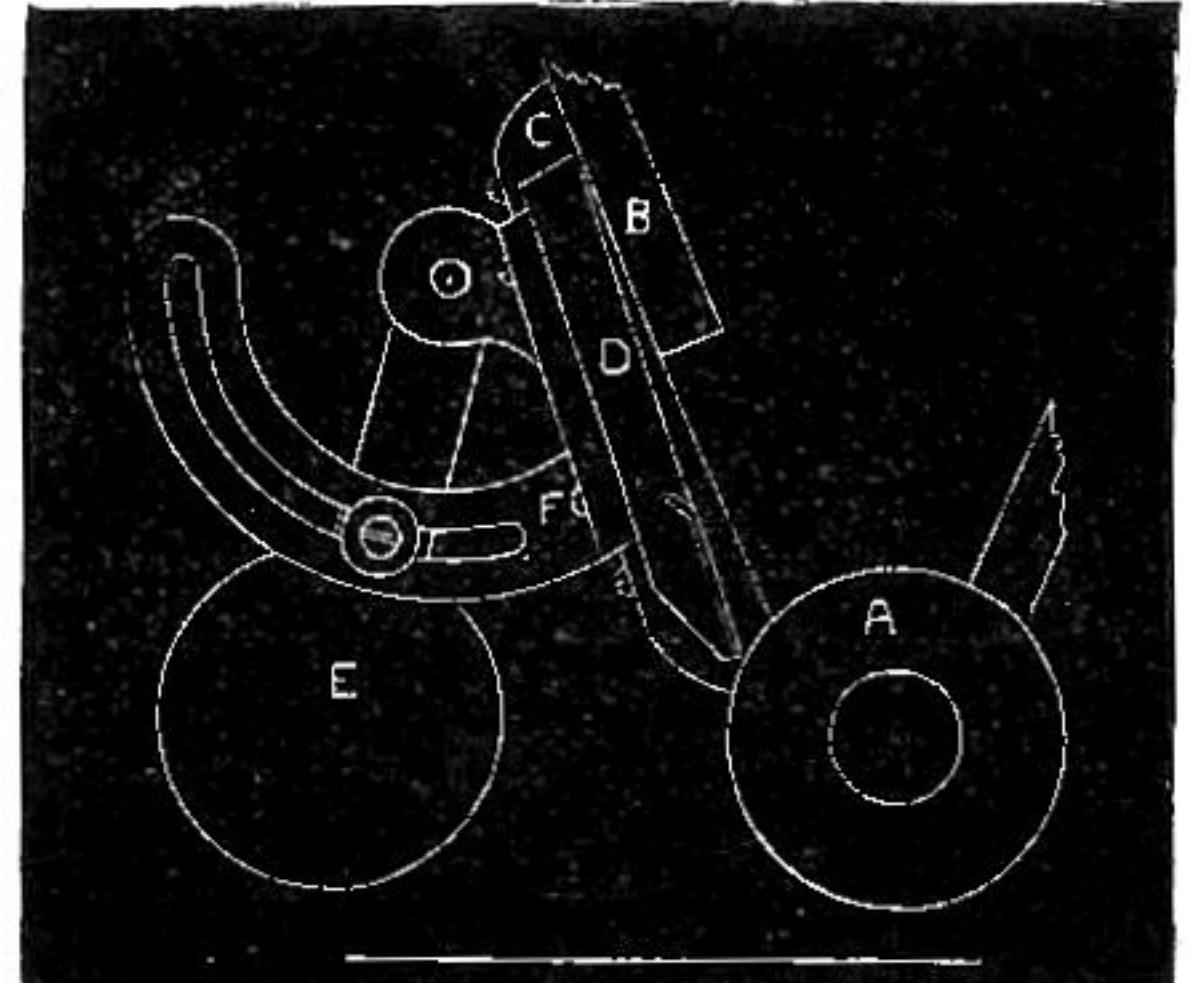


Write us for special prices, stating number and size machines wished to be used on; also, height of ceiling and floor space where they are to be placed.

THROOP'S GRAIN CLEANER CO.
83 TERRACE,
BUFFALO, N. Y.

—[+ LORD'S +]—
Adjustable Automatic Feed Regulator,
FOR ROLLS AND PURIFIERS.

Simples, Cheapest and Best Device ever offered. Warranted to work perfectly on all classes of material.



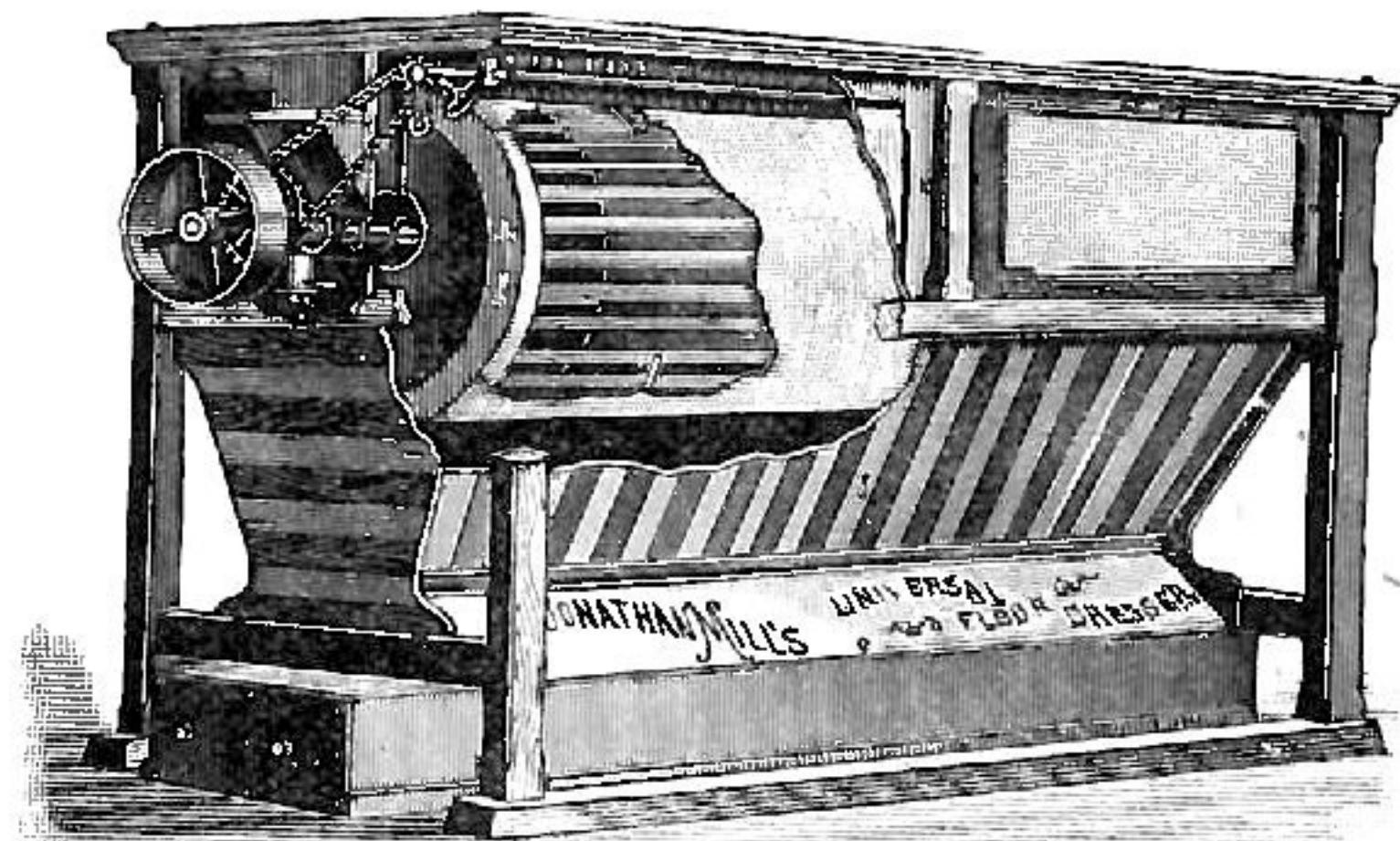
PATENT APPLIED FOR.

End view—A, feed roll; B, section of hopper; C, cleat; D, feed board; E and F, Feed Regulator. Secures a steady stream, full width of feed board at all times. Perfectly reliable under all circumstances. Can be put on any Roll or Purifier in 15 minutes. Price, \$2.50 each; sent on 30 days' trial, or on receipt of \$1.00 will send sample Feed Regulator. In ordering for rolls give length of rolls and class of material; for Purifiers give length of feed board between cleats. Address

CORN & COB CRUSHERS
PRICE, \$15.00.
Send For Circular.
SHAFTING, PULLEYS & HANGERS.
Pulleys a Specialty, Large or Small. Address,
T. B. WOOD & SONS, CHAMBERSBURG, PA.

H. D. LORD, NORTHFIELD, MINN.

THE JONATHAN MILLS UNIVERSAL FLOUR DRESSER



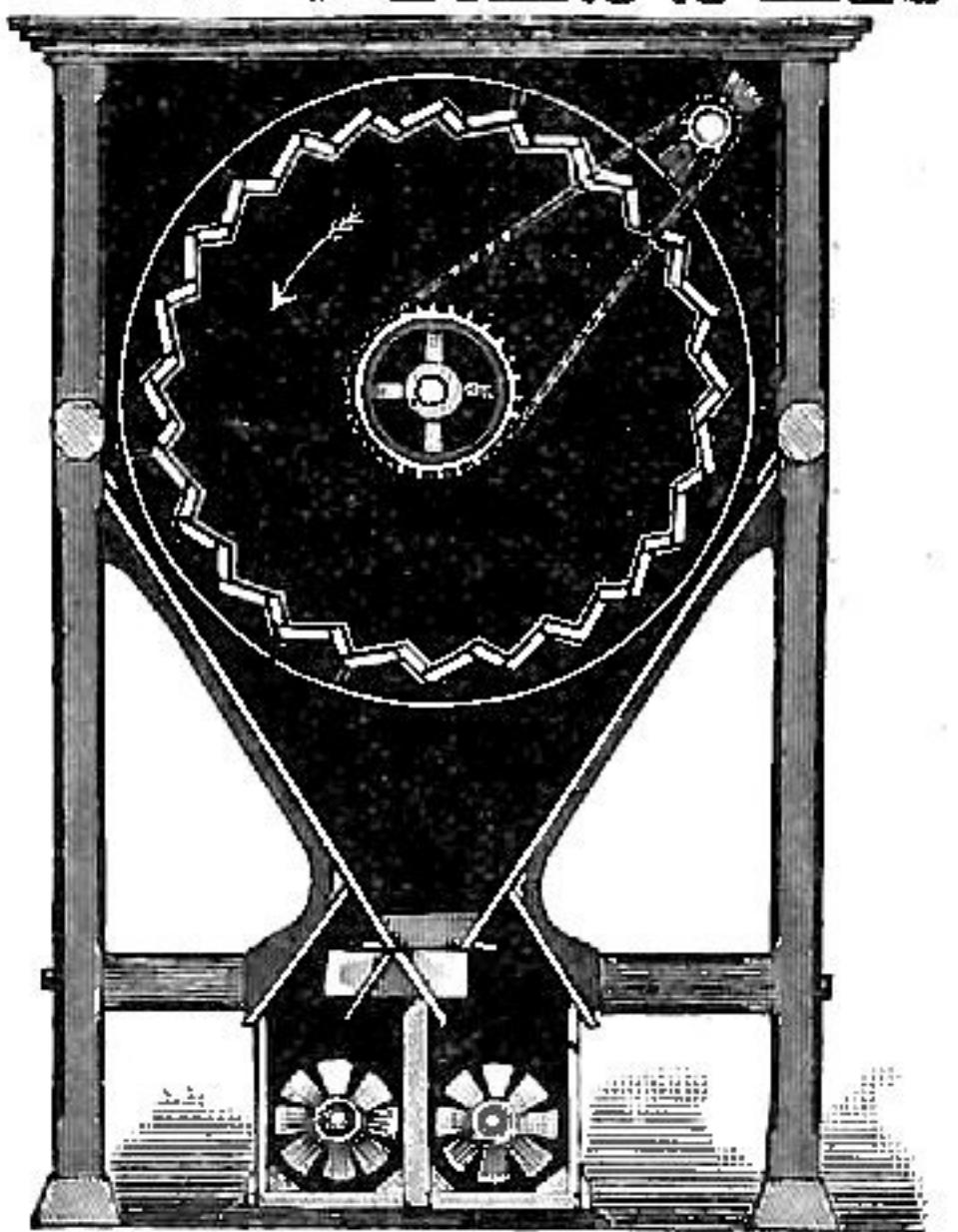
Guaranteed to be Superior to any other Bolting Device for Clear, Clean Bolting or Rebolting of All Grades of Flour.

THEY CANNOT BE BEAT

On any stock, and are being extensively adopted for the entire bolting in new mills.

FINELY DESIGNED AND MECHANICALLY CONSTRUCTED; SLOW SPEED; OCCUPIES SMALL SPACE AND HAS IMMENSE CAPACITY

For Price Lists, Sizes and Dimensions send to the



CUMMER ENGINE CO., CLEVELAND, O.

THE MORSE ELEVATOR BOLT

HAS NO COMPETITOR in CAPACITY or QUALITY of SEPARATIONS MADE.

THE KNICKERBOCKER CO., JACKSON, MICH.

HAZLETON, PA., May 12, 1885.

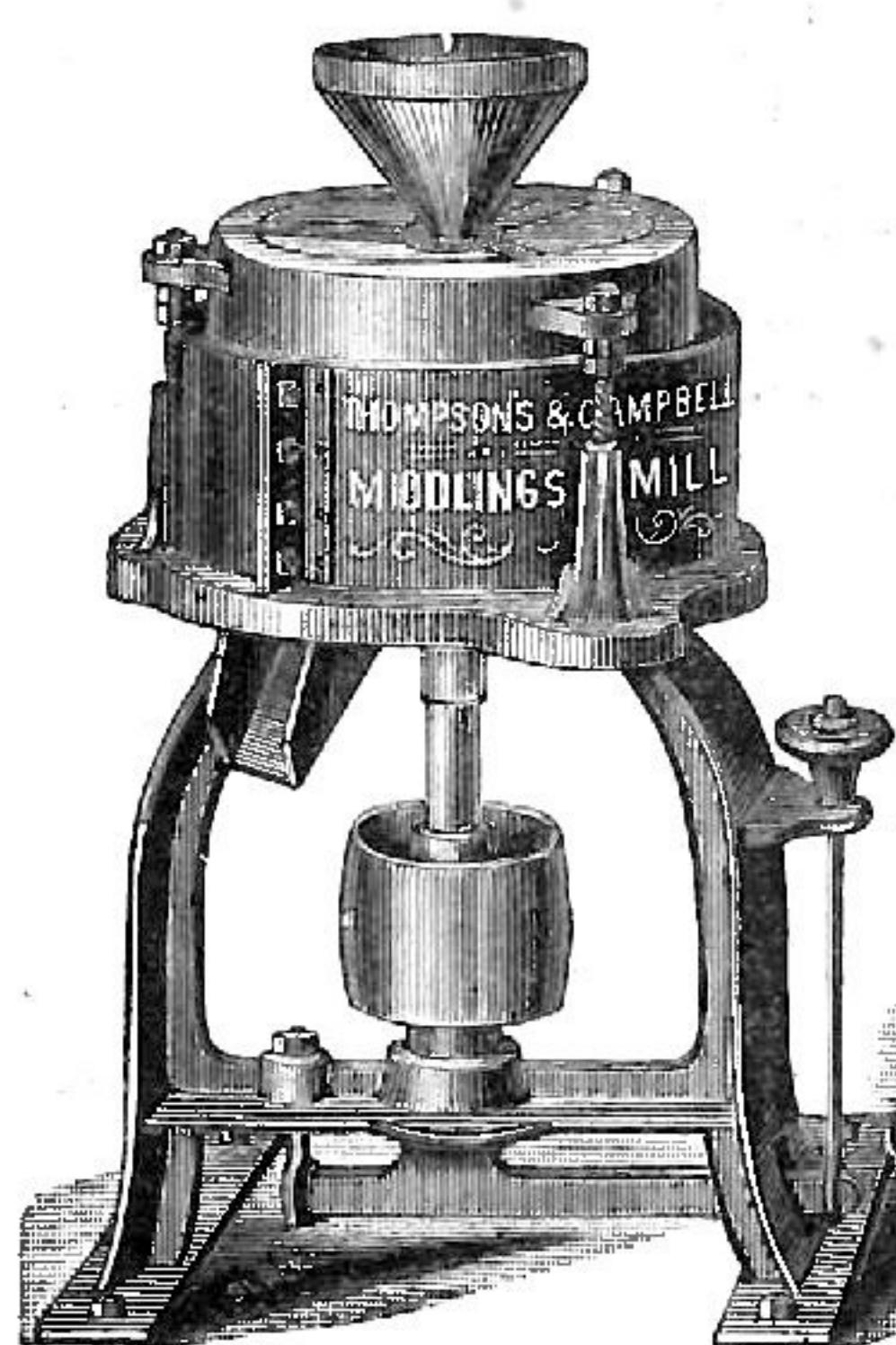
Gentlemen: Yours of the 10th received, and I will say that there is no doubt of the efficiency and capability of the No. 1 machine to do its work, although I cannot start it until Friday night. The other three are all that any sane man can ask for. There is a decided improvement in our flour, much whiter and retains moisture in the loaf fully as long as the finest stone flour. You can make up your mind that I am very enthusiastic on Morse Bolts, and would feel like giving a chromo to anyone who can produce a machine to equal it. They are daisies on anything that you put them at that requires a separation. *Their separation is simply perfect.* I will let you know when the last No. 1 is started, but you can make up your mind it is all O. K., as anyone seeing one of your machines at work will be very anxious to keep on until he makes it his bolting system, if he does not he must be "off his base." I assure you that we are very much pleased. The firm, A. Pardee & Co., are also very well satisfied that it is a good investment. We have brought our low grade from 9 per cent. down to less than 2 per cent. Quite a handsome profit.

Yours, etc.,

C. R. BOMBOY, Head Miller for A. Pardee & Co.

We will furnish plans for bolting in large or small mills, and guarantee satisfactory result
For reasons why the Morse Bolt is best, address,

THE KNICKERBOCKER CO.
JACKSON, - - - MICHIGAN.



TRIMMER'S
IMPROVED ADJUSTABLE
GRAIN RUBBING
Polishing & Separating Machine Combined.
THE EXCELSIOR MIDDLING'S MILL,

The Best offered for sale. They are made by the Best Workmen; of the Best Material; (all Iron Frame.) The Burrs are of Choice Old Quarry (French) Stock, and we can recommend them in the highest terms for Grinding Middlings. They are the Best and Cheapest Mills sold; no trouble to take them apart to dress; they are very simple in construction, and all of the working parts easy got at; and we offer them at prices that all Millers can afford to buy.

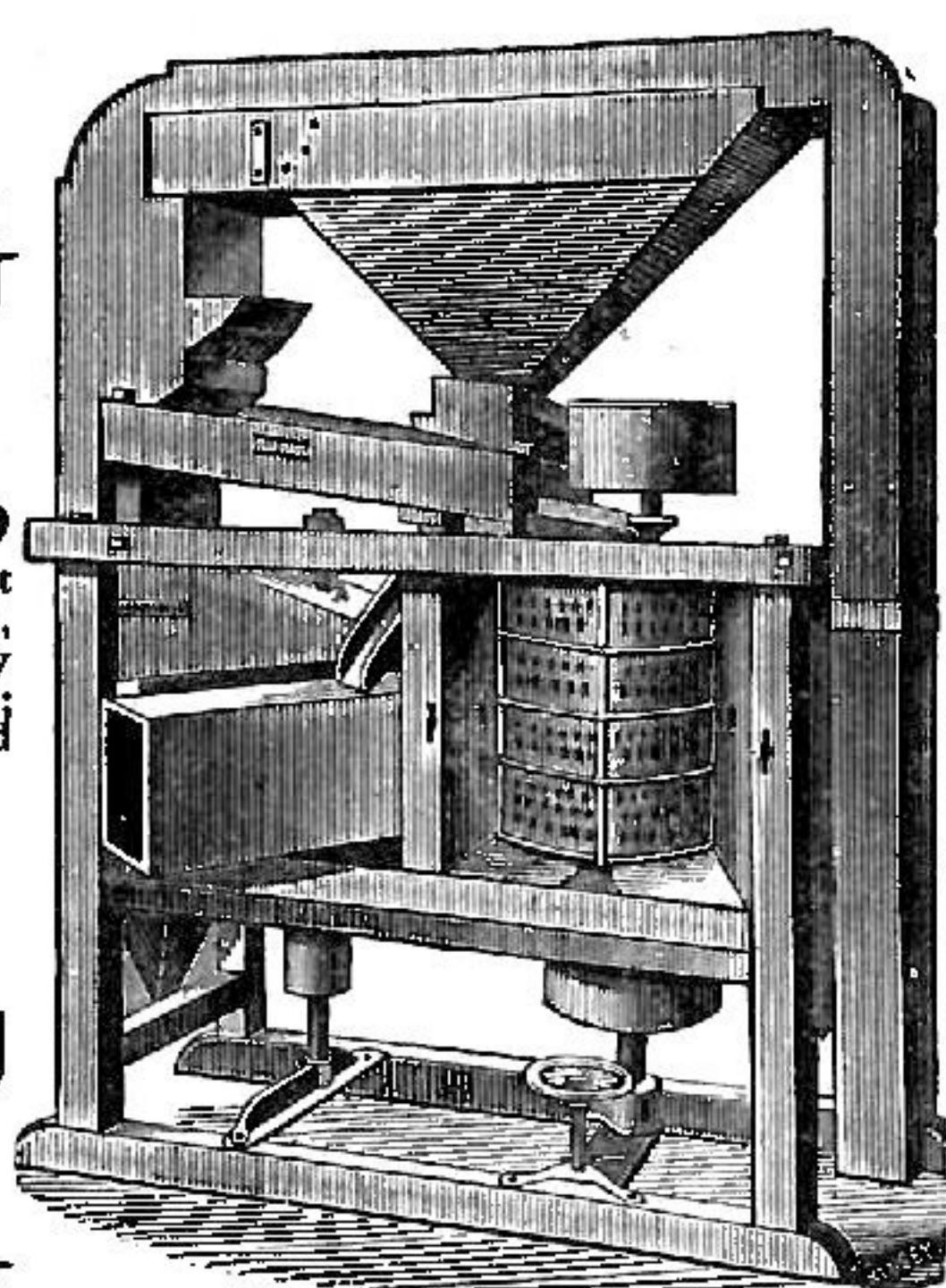
SEND FOR DESCRIPTION AND PRICES.

THOMPSON & CAMPBELL,

Successors to Kreider, Campbell & Co., Millwrights and Machinists,

PHILADELPHIA, PA.

We also build and contract for Roller Mills, and remodel Old Mills to Improved System.



THE BUFFALO DUST COLLECTOR.

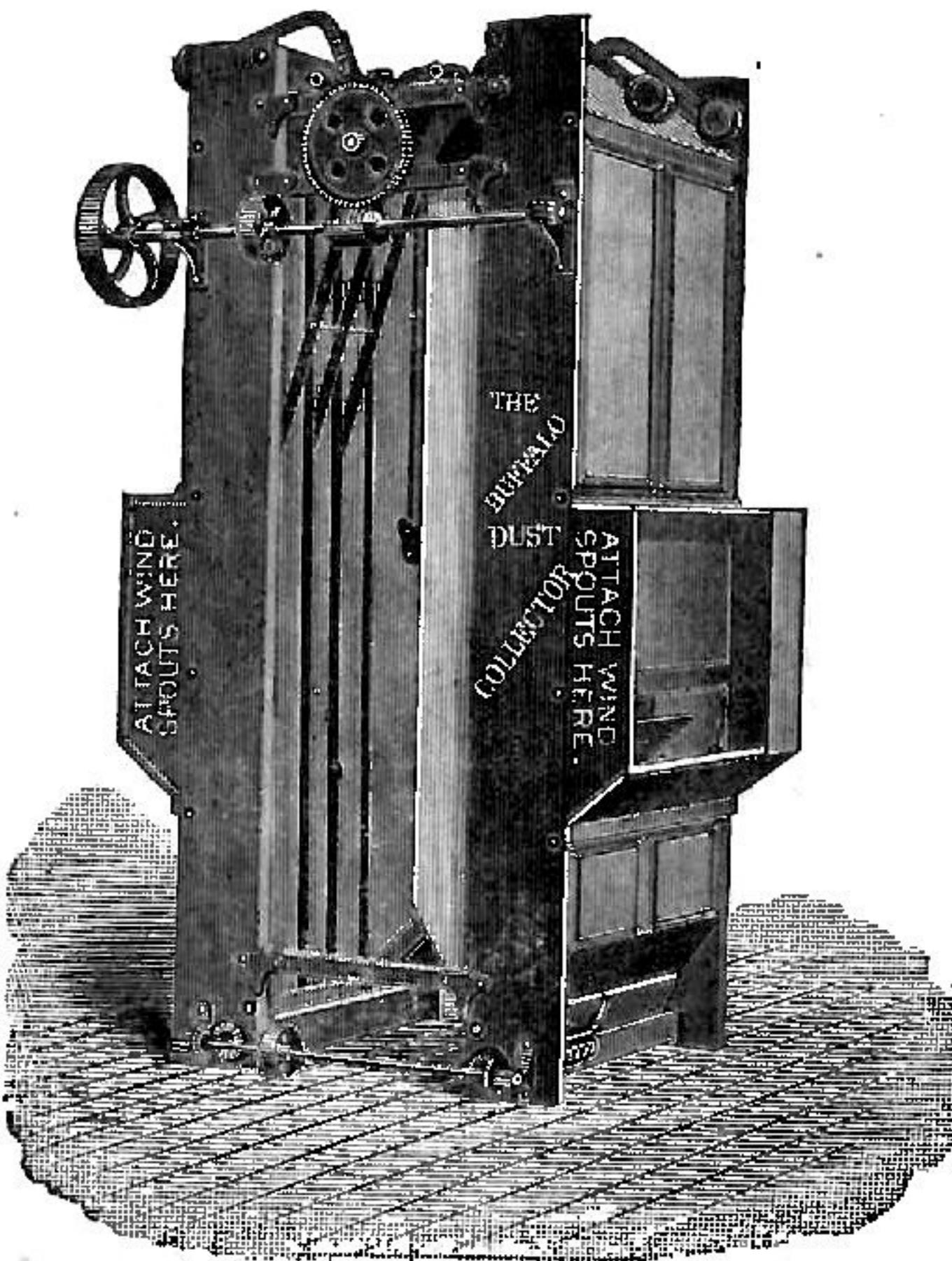
LAST week we mentioned that Throop's Grain Cleaner Co., of this city, was introducing this machine to the millers of the United States, and promised, in an early issue of THE MILLING WORLD to describe it, a promise we now fulfill. The machine is the invention of Ralph Howarth, of Rochdale, Eng. The engraving gives a good representation of it, and flattering reports of its efficiency have been given by users in England and by those who have tried it in this country. The object of this form of construction is to cause the flannel or filtering material fixed in the form of pockets, and generally employed in such apparatus, to be worked and expanded in a horizontal direction from one side of the frame to which it is attached through to the other side of the said frame, and to close the dust-laden air inlet-opening during a part of such operation, for the purpose of producing momentarily a strong partial vacuum on the dust-laden side of the flannel, which assists in removing the dust collected thereon, thus keeping the pores of the flannel open and separating the dust from the air effectually. The action of the apparatus is as follows: The dust-laden air, after being drawn from the rolls, millstones, purifiers, or other analogous machines, is forced into the trunks. The inlet-valves are then opened alternately, and the compartments respectively receive a charge of dust-laden air, which is forced against the pockets of the filtering material. The latter, being at such times expanded in compartments, separates the dust from the air and permits the purified air to escape into another compartment. After a certain interval the inlet-valve of one compartment is closed and the shaking motion belonging to that one compartment commences its functions, and causes, first, the pocket to move and expand in the dust-laden air receiving compartment, and afterward to fall quickly back to its former or original position in compartment, causing a momentary vacuum, such vacuum, and shaking, effectually removing all the dust which has collected on the filtering material. The inlet-valve of that compartment is then opened and the dust-laden air readmitted. The formation of a partial vacuum on the dust-laden side of the flannel or filtering material during the time the latter is caused to return to its original position in compartment by the shaking motion described is obtained by closing the respective inlet-valve during a part of such operation. The partial vacuum, formed in the manner described, assists in keeping the flannel or filtering material always porous, thus causing the dust from the air to be separated more effectually. The dust separated from the air drops into hoppers, and is then discharged by means of conveyors, and afterward collected into suitable receptacles. A few advantages gained by using it, the manufacturers

say, are: The entire prevention of waste and doing away with dust-room. Making a clean and mechanical finish to the milling trade. Entire removal of risk of fire and explosion from dust-room. Enabling the miller at discretion to either put in or keep the dust out of his flour. Its adaptability to every size of room or mill in one machine, or in several separate machines. The comparatively small amount of floor space it requires; the comparative cheapness of the machine judged by the amount of work it will perform. Further information can be obtained of Throop's Grain Cleaner Co., Buffalo, N. Y.

IDLE CAPITAL.

Throughout the civilized world idle capital is looking for safe investment. Capitalists no longer seek large returns from their investments. The only thing now wanted is security. Never in history, so far as known, has the rate of interest for good securities been so low. Recently, loans have been made by states in this country of undoubted credit at a yearly rate of 3½ per cent.

Not only have such loans been completely absorbed, but the subscriptions have amounted to several times the total asked for. That the amount of idle capital in Europe is as great, in proportion, as in this country is evident from the placing of the new Egyptian loan. This loan was for \$45,000,000 guaranteed by all the powers of Europe. Subscriptions were opened in the three leading financial centers of Europe, and amounted to the enormous sum of one thousand millions of dollars. That is, over twenty-two times the amount of money asked for was offered; and now the bonds are quoted at 3½ premium in the open market. Why are these vast amounts, both in this country and in Europe, lying idle? Principally because investors have lost their confidence in private enterprises. When that confidence has been restored, and these vast amounts of capital are again put into circu-



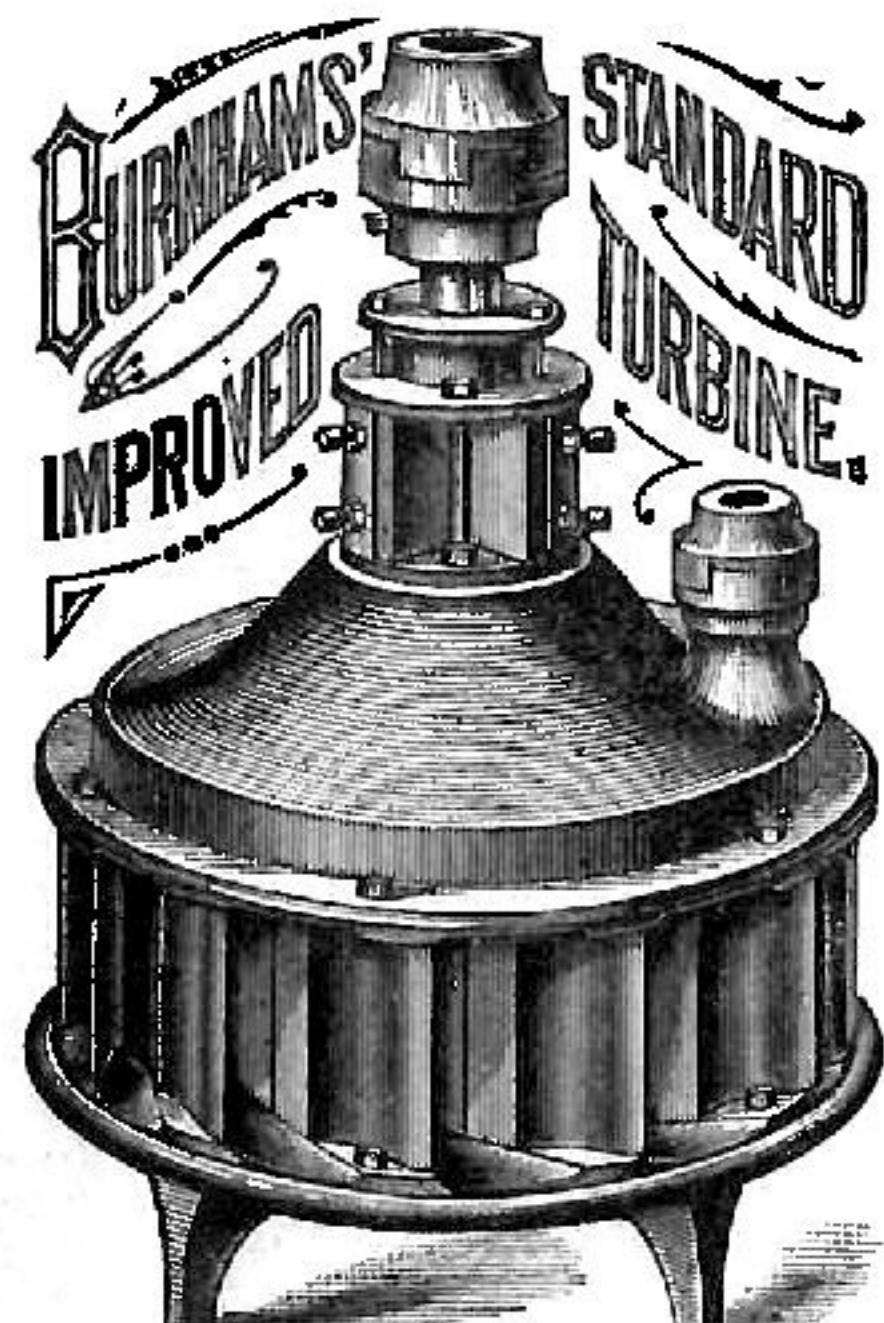
THE BUFFALO DUST COLLECTOR.

lation, business will be revived. After every collapse, investors are becoming more watchful, in consequence of the bitter experience. It thus follows that each collapse, unless due to special causes, is less severe than the preceding one. It is probable that these disasters in the future will be less and less frequent.

It is estimated that there are 100,000,000 acres of land on the Pacific coast of the United States that are especially adapted to wheat culture. Of this California has 25,000,000, or one-fourth of the whole; Oregon has 18,000,000 acres; Washington territory has 16,000,000 acres; Colorado and Idaho 10,000,000 each; Montana, Utah and Wyoming 7,000,000 each, and the great bulk of all this wheat land yet lies untouched.

THE subscription price of THE MILLING WORLD is \$1.00 per annum. Can you afford to be without it?

OFFICE: No. 11 S. George St., York, Pa.



WORKS: Christians, Lancaster Co., Pa.

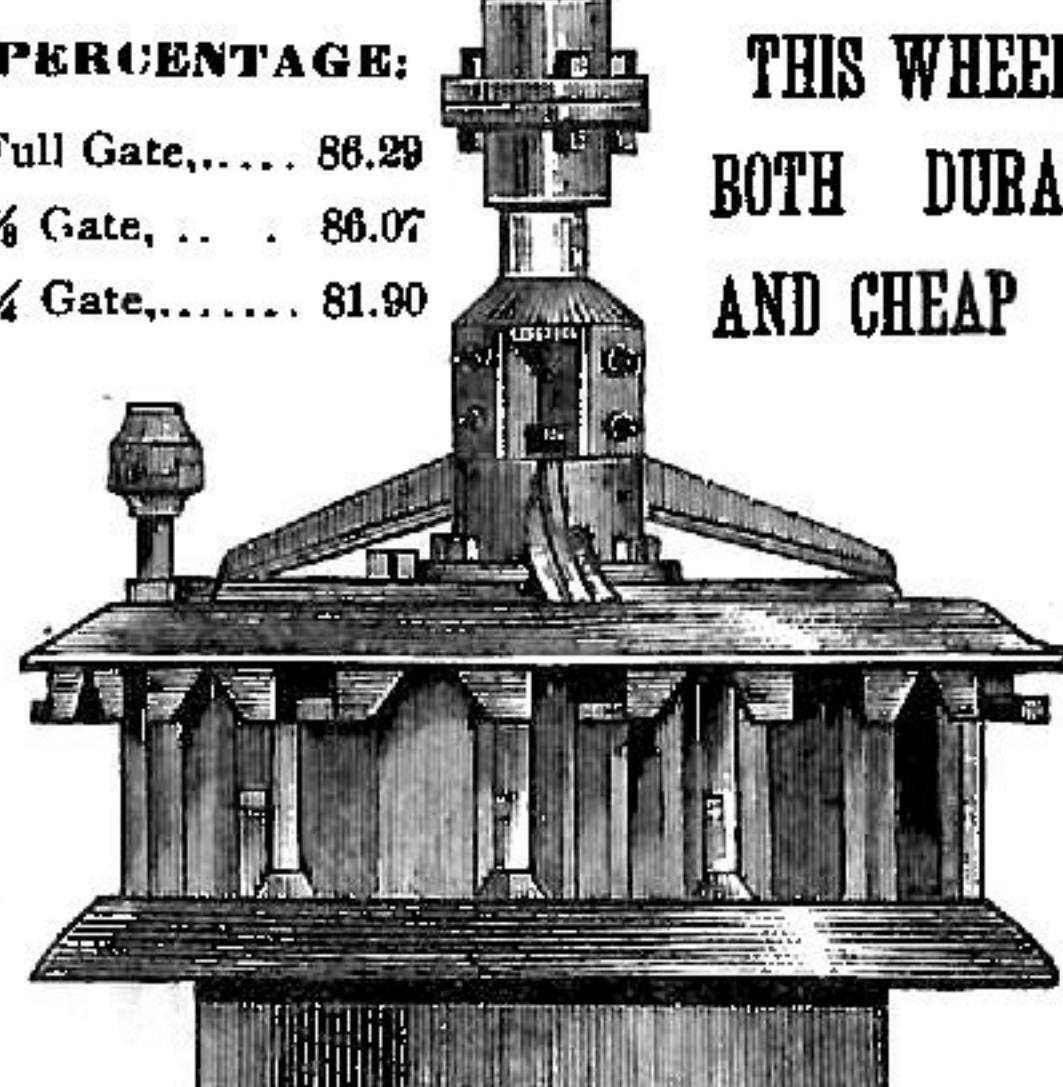
Is the BEST constructed and finished Turbine and gives better PERCENTAGE with part or full gate, and is sold for LESS MONEY per horse power than any other Water Wheel. New Pamphlet Sent Free.

THE IMPROVED "SUCCESS"

PERCENTAGE:

Full Gate,	86.29
% Gate,	86.07
¾ Gate,	81.90

THIS WHEEL IS
BOTH DURABLE
AND CHEAP



SEND FOR PAMPHLET TO

S. Morgan Smith York, Pa.

DWIGHT CUSHMAN,

MANUFACTURER OF
The Cushman Scroll Water
Wheel, Combination Turbine
Water Wheel, Iron Flumes for
the Combination Wheel.

The Scroll Wheel Needs
No Flume.

Also Mill Gearing and Shaft
ing of every description.
Prices low. Send for Circular
and Prices before buying any
other Wheel.

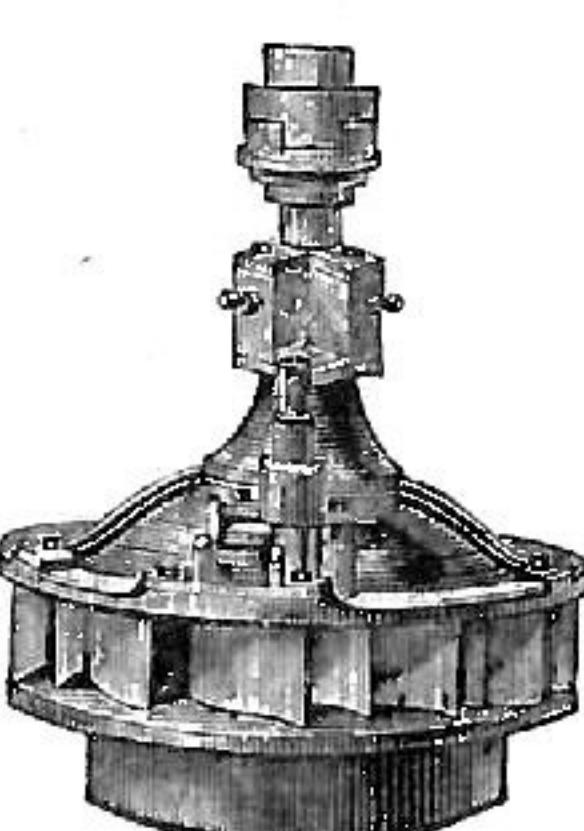
DWIGHT CUSHMAN, HARTFORD, CT.

MERCER'S RELIABLE

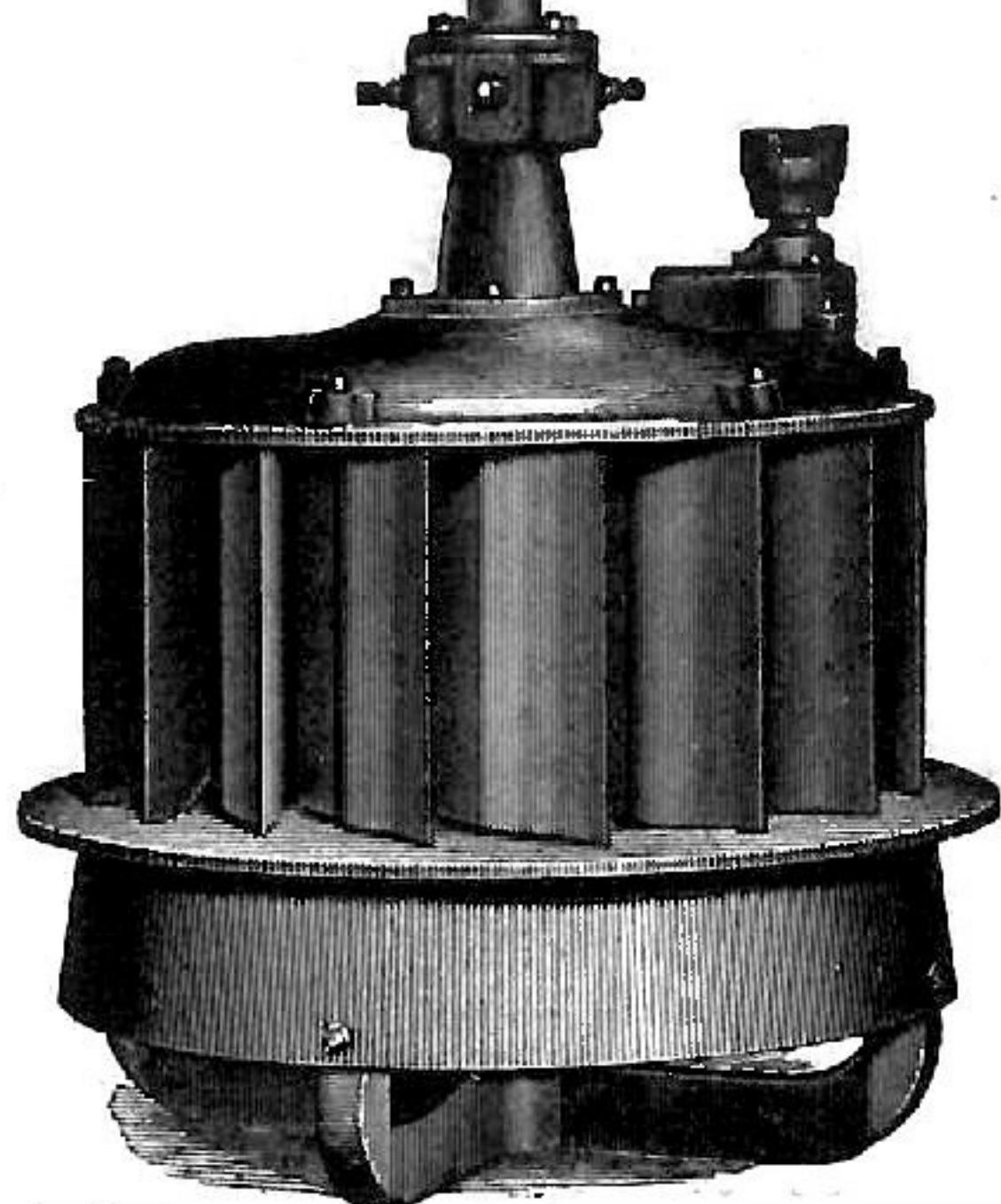
Turbine Water Wheel.

This wheel is acknowledged one of the best on the market. Has valuable improvements in the construction which is commanding the attention of buyers. Send for catalogue and price list. T. B. MERCER,

WEST CHESTER,
CHESTER CO., PA.



THE VICTOR TURBINE



Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume.

Size Wheel.	Head in Ft.	H. P.	Per cent Useful Effect.
15-inch,	18.06	30.17	.8932
17½ in.,	17.96	36.35	.8930
20-inch,	18.21	49.00	.8532
25-inch,	17.90	68.62	.8584
30-inch,	11.65	52.54	.8676

WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably commend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material. We also continue to manufacture and sell at very low prices

THE ECLIPSE DOUBLE TURBINE

So long and favorably known. State your requirements, and send for Catalogue to the

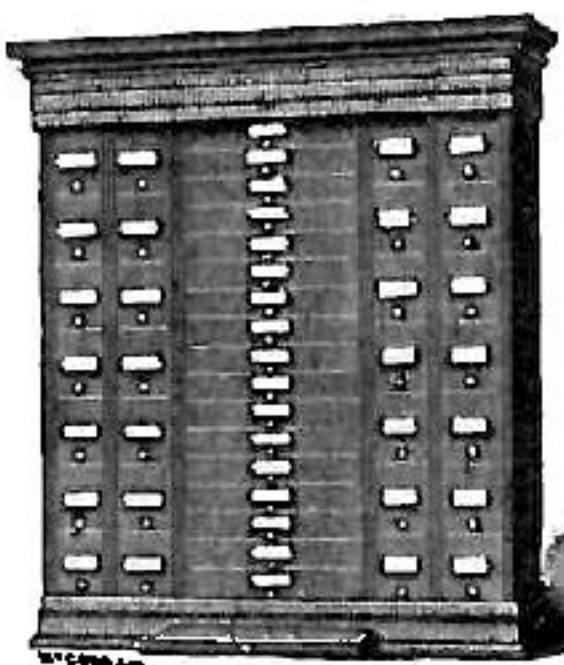
STILWELL & BIERCE MFG. CO.
DAYTON, OHIO, U. S. A.

LESNER'S IMPROVED TURBINE.

Simple,
Durable,
Strong
Gate Works
EASILY
—
RAPIDLY.
PERFECT
Satisfaction
—
GUARANTEED.

W. B. WEMPLE'S SONS, FULTONVILLE, N.Y.

PURSELL'S PATENT PAPER PROTECTOR,



AND FILES CASE,
For filing letters, blanks, catalogues, and all kinds of papers. It is *absolutely dust proof*; is just the thing for millers and warehouses. Fifty per cent cheaper than any other make. Send for illustrated circular and price list.

H. D. PURSELL & BRO., MANUF'RS,
WASHINGTON C. H., OHIO.

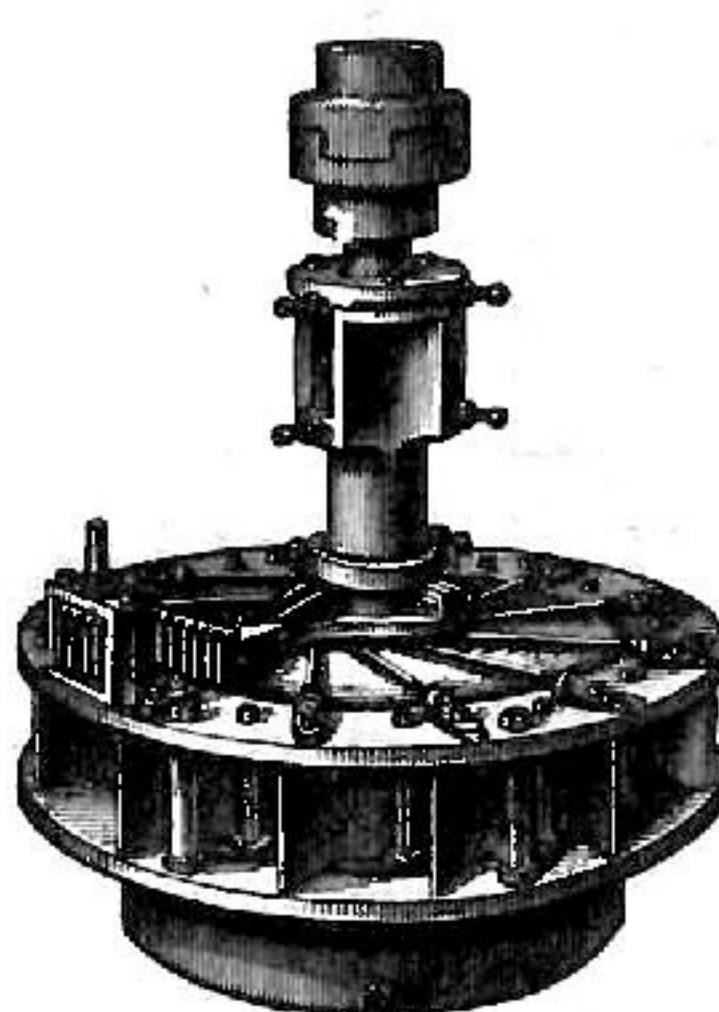
PLEASE mention THE MILLING WORLD when you write to advertisers. It will pay you to do this.

LEFFEL'S WATER WHEEL

MADE BY JAMES LEFFEL & CO.

The "OLD RELIABLE"

with improvements, making it the



MOST PERFECT TURBINE NOW IN USE.

Comprising the Largest and the Smallest Wheels, under both the Highest and Lowest Heads used in this Country. Our new Illustrated Book sent free to those owning water power.

Those improving water power should not fail to write us for New Prices before buying elsewhere. New Shops and New Machinery are provided for making this wheel. Address

JAMES LEFFEL & CO., SPRINGFIELD, OHIO, AND 110 LIBERTY STREET, N. Y. CITY.

POOLE & HUNT'S LEFFEL TURBINE WATER WHEELS

Made of Best Materials, and in the Best Style of Workmanship.

MACHINE-MOLDED MILL GEARING

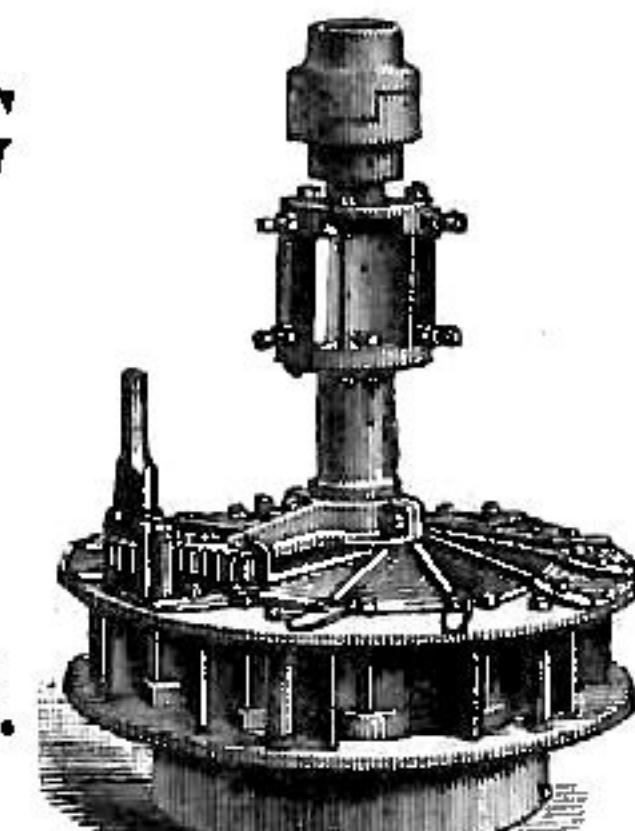
From 1 to 30 feet diameter of any desired face or pitch, moulded by our own Special Machinery.

SHAFTING, PULLEYS AND HANGERS

Of the Latest and Most Improved Designs.

Engines, Boilers,
Mixers and General Outfit for Fertilizer Works.

Special Attention given to Heavy Gearing. Shipping Facilities the Best in All Directions.



POOLE & HUNT, BALTIMORE, MD.

PATENT STEEL SHAFTING.

PATENT

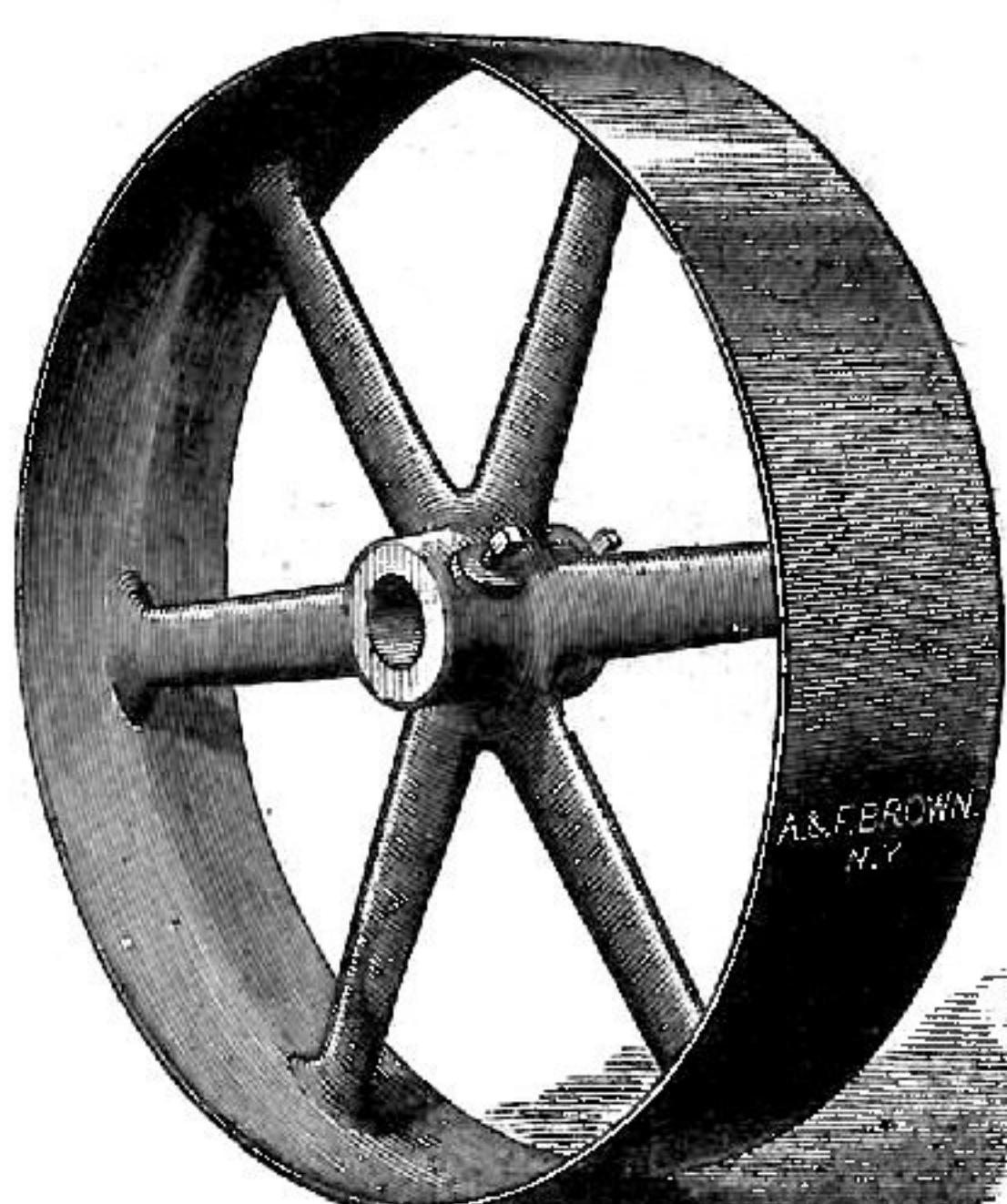
SELF-OILING HANGERS

BEST IN USE.

PATENT INTERNAL CLAMP COUPLINGS
BROWN'S PATENT FRICTION CLUTCH.

A. & F. BROWN, Park Place, NEW YORK.

SEND FOR ILLUSTRATED CATALOGUE AND DISCOUNT SHEET.



OFFICE
43 PARK PLACE
WORKS
57, 59 AND 61
LEWIS ST.
60, 62, 64 & 66
Cannon
ST.
NEW YORK

PROGRESS MACHINE WORKS.
A. & F. BROWN.

THE GRAIN AND FLOUR TRADE.

OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Sept. 5, 1885.

The "bulls" are depending almost wholly upon the foreign markets to confirm their position, but there is, as yet, little or no tendency in the direction of obliterating the margin that exists against an outward movement from this country. There has been more or less talk of injuriously low temperature in the Northwest, but this failed to influence either the wheat or corn market, being more than counter-balanced by the absence of considerable export demand. There has been practically no demand from exporters for cash wheat, and from local millers the call has been light, with prices for the cash grain showing no decided changes, and the market finally irregular in tone.

There has been only a moderate demand for flour, with some irregularity in prices, but no quotable change. Cable figures give the Liverpool stock of flour as 360,000 to 370,000 barrels, the average of which is 256,000 sacks. The market for rye flour has been moderately active, and closed barely steady, with the range of prices nominally \$3.00@4.40—the latter an extreme for small lots. The market for corn meal has been only moderately active, and at the close tending in buyers' favor. Bag meal closed barely steady, after a moderately active business. Mill feed moderately active, with the tone of the market finally in buyers' favor, owing to the decline in wheat.

FOREIGN EXCHANGE.

Sterling continues weak and leading drawers again reduced rates. Both security and commercial bills are in ample supply, and with the present light demand and prospects of increased offerings of bills from cotton and breadstuffs shipments, the tendency of rates is actually downward. Posted rates closed weak at 4.83@4.83½ and 4.85@4.85½. Actual rates were as follows: Sixty days', 4.82@4.82½; demand, 4.84½@4.84¾; cables, 4.85@4.85¼; commercial bills, 4.81@4.81¼. Continental bills were very weak. Francs, 5.22@5.21½ and 5.20½@5.20; reichsmarks, 94½@94½ and 95½@95½; guilders, 40½@40½. The closing posted rates were as follows:

	60 days.	30 days.
London.....	4 83½	4 85½
Paris francs.....	5 20	5 17½
Geneva.....	5 19½	5 16½
Berlin, reichsmarks.....	95½	95½
Amsterdam, guilders.....	40½	40½

BUFFALO WHEAT MARKET.

Buffalo, N. Y., Sept. 4, 1885.

Our market to-day is very quiet; there is some demand for milling wheats. New winter wheat from Michigan from samples we have seen here gives promise of very fine milling wheat. Ohio, Indiana and southern Illinois wheat that has arrived here is very poor. The northwestern wheat crop will be a smaller berry but from what we have seen promises to be of good quality. No. 1 hard Duluth quoted at 89c., No. 1 Northern 86½c., No. 2 Northern offered at 80c., No. 2 red offered on track at 9c., No. 1 white at 86½@87c. Corn in good demand and firmer to-day. No. 2 mixed in store 47½@48c., No. 2 yellow on track 48½@49c. Oats quiet; No. 2 white 32c. on track.

JAS. S. McGOWAN & SON.

BUFFALO MARKETS.

FLOUR—City ground, at wholesale—Clear Northern Pacific spring, \$4.50@5.00; straight Northern Pacific spring, \$5.00@5.50; amber, \$5.00@5.50; white winter, \$5.00@5.50; new process, \$5.75@6.00. Western, at wholesale—Straight Minnesota bakers, \$5.00@5.50; clear do, \$4.50@5.00; white winter, \$5.00@5.25; new process, \$5.50@6.25; low-grade flour, \$8.00@4.00. Graham flour, \$4.75@5.25. RYE FLOUR—In fair demand at \$4.25@4.50. BUCKWHEAT FLOUR—Retailing at \$3.00 per cwt. OATMEAL—Ingolsor, \$5.50@5.50; Bannerman's, \$5.75@5.50. CORN-MEAL—Coarse, \$1.05; fine, \$1.25 per cwt. WHEAT—No. 1 hard Northern Pacific opened firm but closed weak; sales 10,500 bu in car lots at 89c and 17,200 bu do in three lots at 89c; at the Call Board 89½c asked 88½c bid cash for 5,000 bu and car-lots; 89½c asked 88½c bid Sept.; sale 500 bu No. 1 Northern at 86½c; winter wheat firm; sale one load No. 1 white at 88c, 1 do milling red at 90c, on track; for No. 2 red 92c asked, 90c bid; 89c asked 87c bid for No. 1 white. CORN—Dull and weak; sales 8,200 bu. No. 2 mixed at 48c and 4,000 bu do at 48½c; at the close same grade offered at 48c; at the Call Board, 48½c asked 47½c bid in car-lots; 47½c asked 47c bid Sept.; 46c asked Dec. OATS—Quiet; sale 2 car-loads No. 2 white at 81½@81½c; No. 2 mixed nominal at 29@30c. BARLEY—Malting season closed; nominal. RYE—Market quiet and nominal.

JAMES S. McGOWAN & SON,
SHIPPING AND COMMISSION MERCHANTS.
Choice Milling Wheats a Specialty
Room 60 Board of Trade Building.
BUFFALO, N. Y.
No Charge for Inspection

CHARLES WELLS & SONS,
MANUFACTURERS OF:
Mill Picks, Stone Cutters' Tools,
AND EDGE TOOLS IN GENERAL.
Particular attention given to Repairs.
235 Mill Cor. Platt St. ROCHESTER, N.Y.

THE FLOUR CITY
DOUBLE TURBINE.

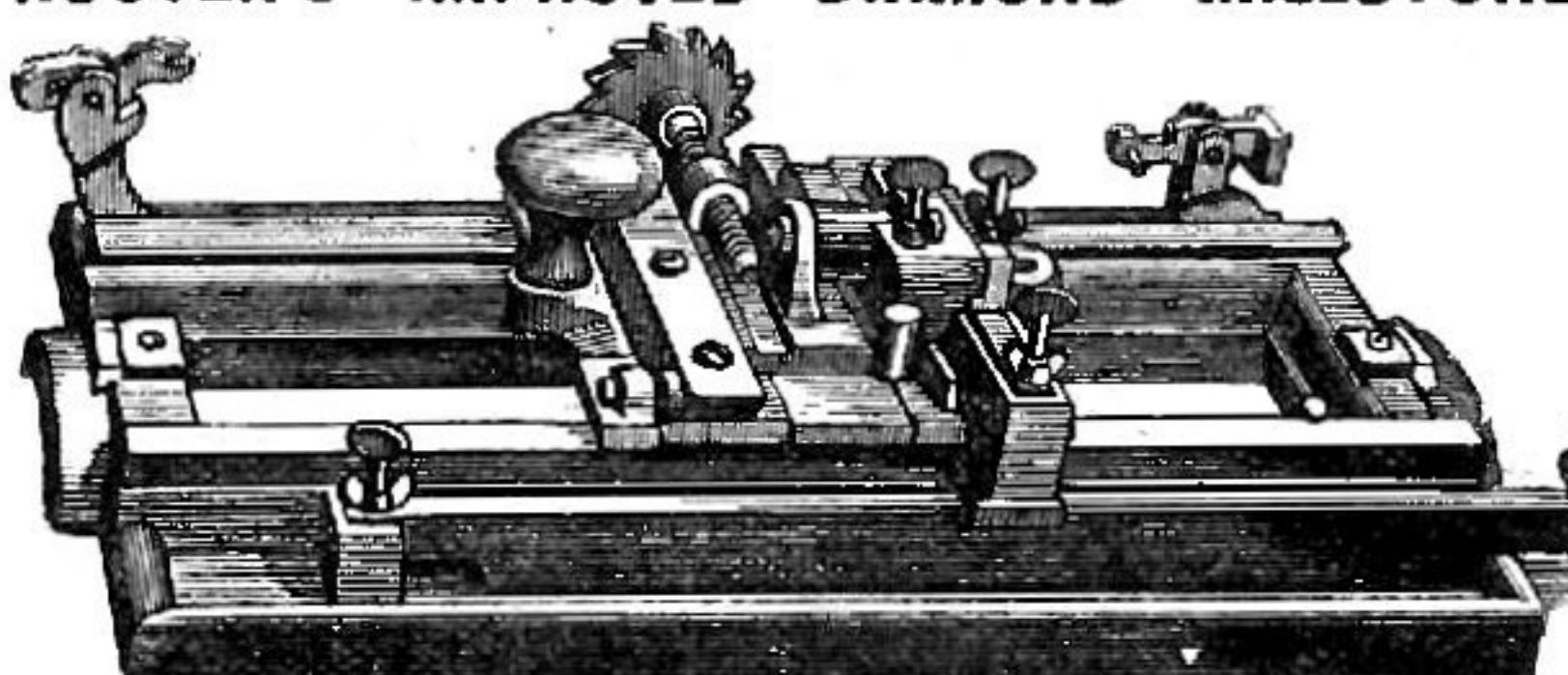
STRENGTH, DURABILITY & ECONOMY.

Will give as high percentage of power with full water as the best. With half water double the power of the best wheels under the same conditions. Send for Descriptive Circular and Tables.

The C. R. Tompkins Co.
ROCHESTER, N. Y.

HOOVER'S IMPROVED DIAMOND MILLSTONE DRESSING MACHINE.

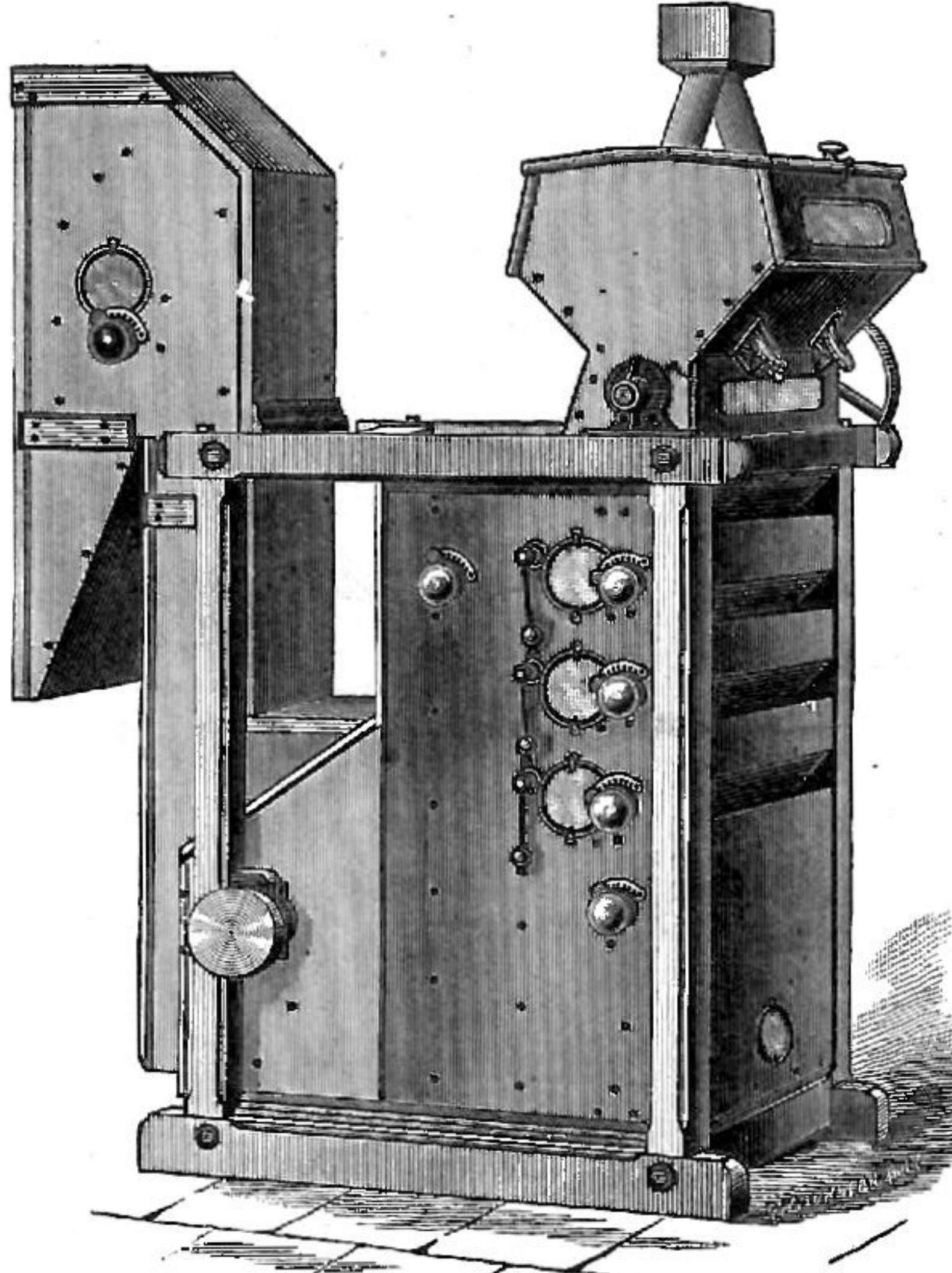
ADAPTED TO ALL KINDS OF DRESSING.



No. 1, to face and crack \$25.00
No. 2, to face, crack, dress furrows, and will dress any size stone..... 45.00
No. 3, to face, crack and dress furrows..... 40.00

Will do as good work, and is more easily adjusted than any other machine. Sent on 30 days trial. Address for circulars, containing full information.

C. S. HOOVER, Patentee and Manufacturer, 409 East King St., LANCASTER, PENN.



ENTIRELY NEW
IN PRINCIPLE.

The Wehner
PATENT
PURIFIER
AND
ASPIRATOR.

Write for Full Particulars and
Circulars to the Manufacturer,

Julius Dietz
187 MICHIGAN ST.,
BUFFALO, N. Y.

THE BEST AND CHEAPEST
COB CRUSHER
IN THE WORLD.

Steel Being Used in its Construction.

AGENTS WANTED EVERYWHERE.
CAPACITY 75 BUSH. PER HOUR.

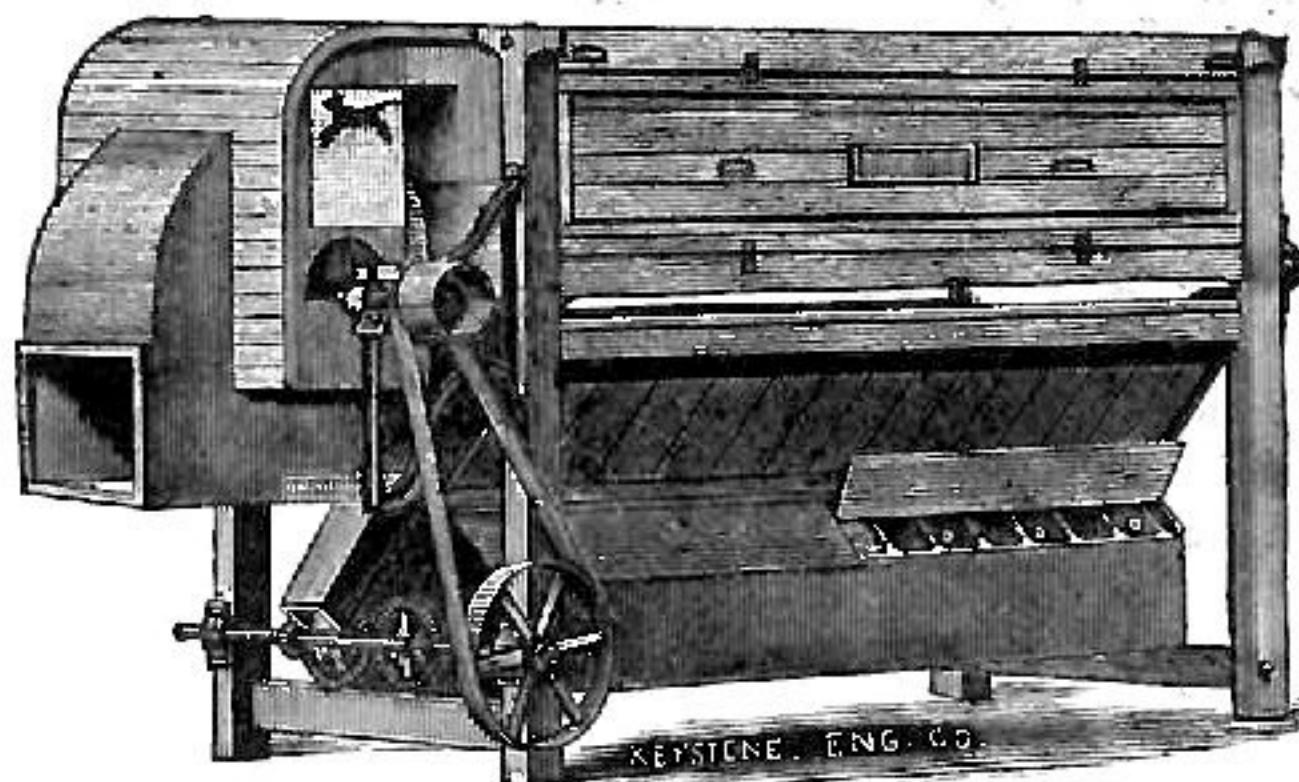
Thousands of these Crushers are now in use, and giving entire satisfaction.

Please send for Circulars.

R. C. McCULLEY, LANCASTER, PENN.



PURIFICATION



MESSRS. WOLF & HAMAKER, CHAMBERSBURG, PA.

HAZLETON, PA., Jan. 2, 1885.

Gents: Yours of Dec. 27, 1884, asking as to our mill. We are satisfied with the mill and the work done by you, as we stated July 1, 1884. Run ever since, no chokes or break-downs, and not a single change, and our flour entirely satisfactory, and yield as close as can be made by anyone. I am also well pleased with your Purifiers. We are using four (4) of them, running alongside of Smith purifier. I prefer yours on account of power to drive them is less, takes less space, costs less money, requires less attention, easy access to all parts, very easy to examine cloths or take out frame and put on new cloth, while it is quite a job to examine cloth or put on a new one on the Smith machine. But the best and most important point is the feed device on your machine, as it is simple, and all that can be asked for, as no matter how the feed comes, slow or fast, it will distribute it evenly, entirely across the sieve, while the Smith thumb-screw feed will not do it, consequently the Smith requires attention or it will only feed part way across the sieve, and no Purifier can do good work unless it has an even flow. If I was to be judge I should give you the BELT for the Best Purifier, as the work done by them is excellent. We are entirely satisfied with your work done, and especially with your machines.

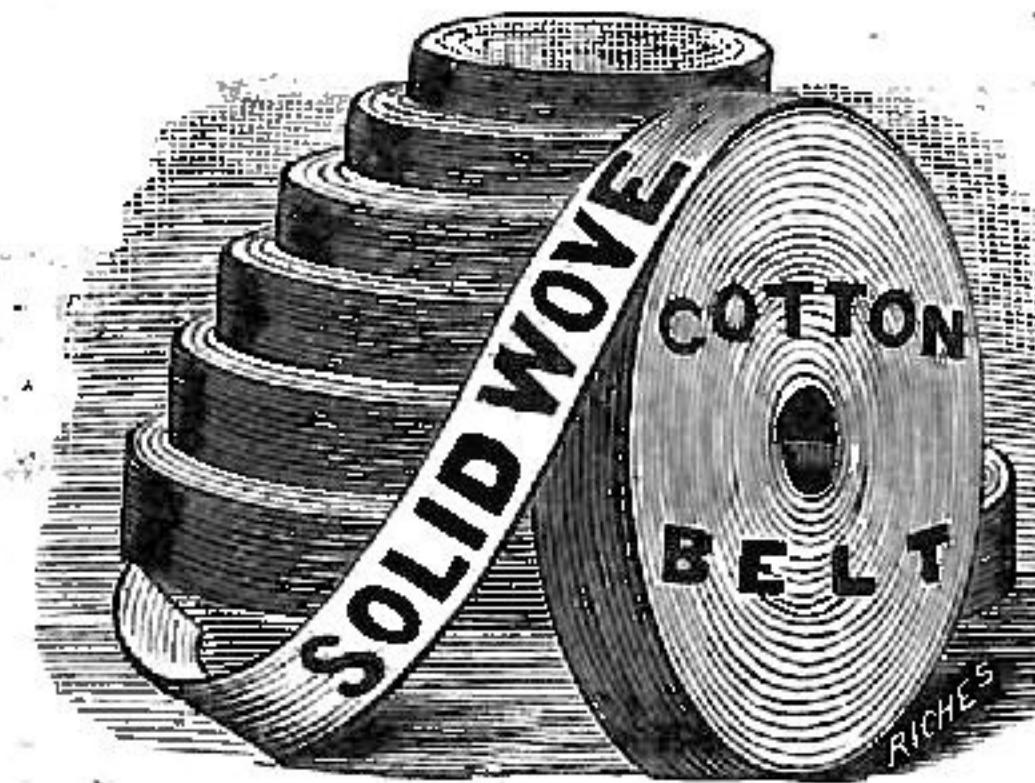
C. R. BOMBOY, Head Miller for A. Pardee & Co.

WOLF & HAMAKER, SOLE MAKERS, **CHAMBERSBURG, PA.**

ROLLS RE-GROUND

And Re-corrugated to order. Porcelain rolls re-dressed. Our Machinery for this purpose is very accurate. Can do work promptly.

CASE MFG. CO., COLUMBUS, OHIO.



MILL SUPPLIES.

Everything Used in a Mill of Every Kind Always on Hand.

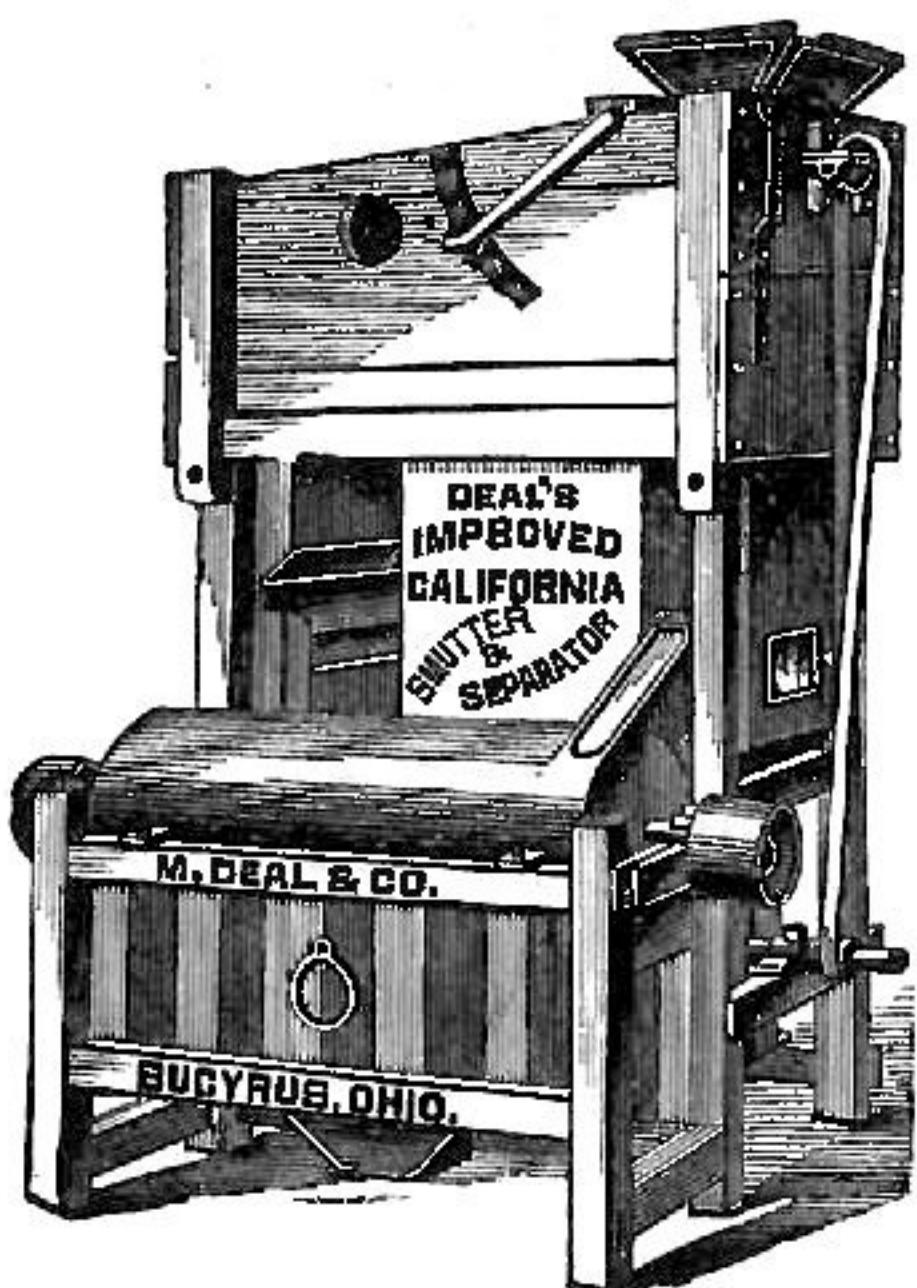
LEATHER, COTTON & RUBBER

BETLING,

BOLTING CLOTH,

Elevator Buckets, Bolts, Mill Irons, &c. Prices Close and Quality the Best.

CASE MFG. CO.
COLUMBUS, OHIO.



[CALIFORNIA!]

DEAL'S CALIFORNIA MAGNETIC

BRUSH SMUTTER & SEPARATOR COMBINED

Warranted The Very Best in America.

The purchaser being the judge after 60- or 90 days' trial. We manufacture a complete line of GRAIN CLEANING MACHINERY, and guarantee every machine to give entire satisfaction or no pay. Send for circulars, it will pay you.

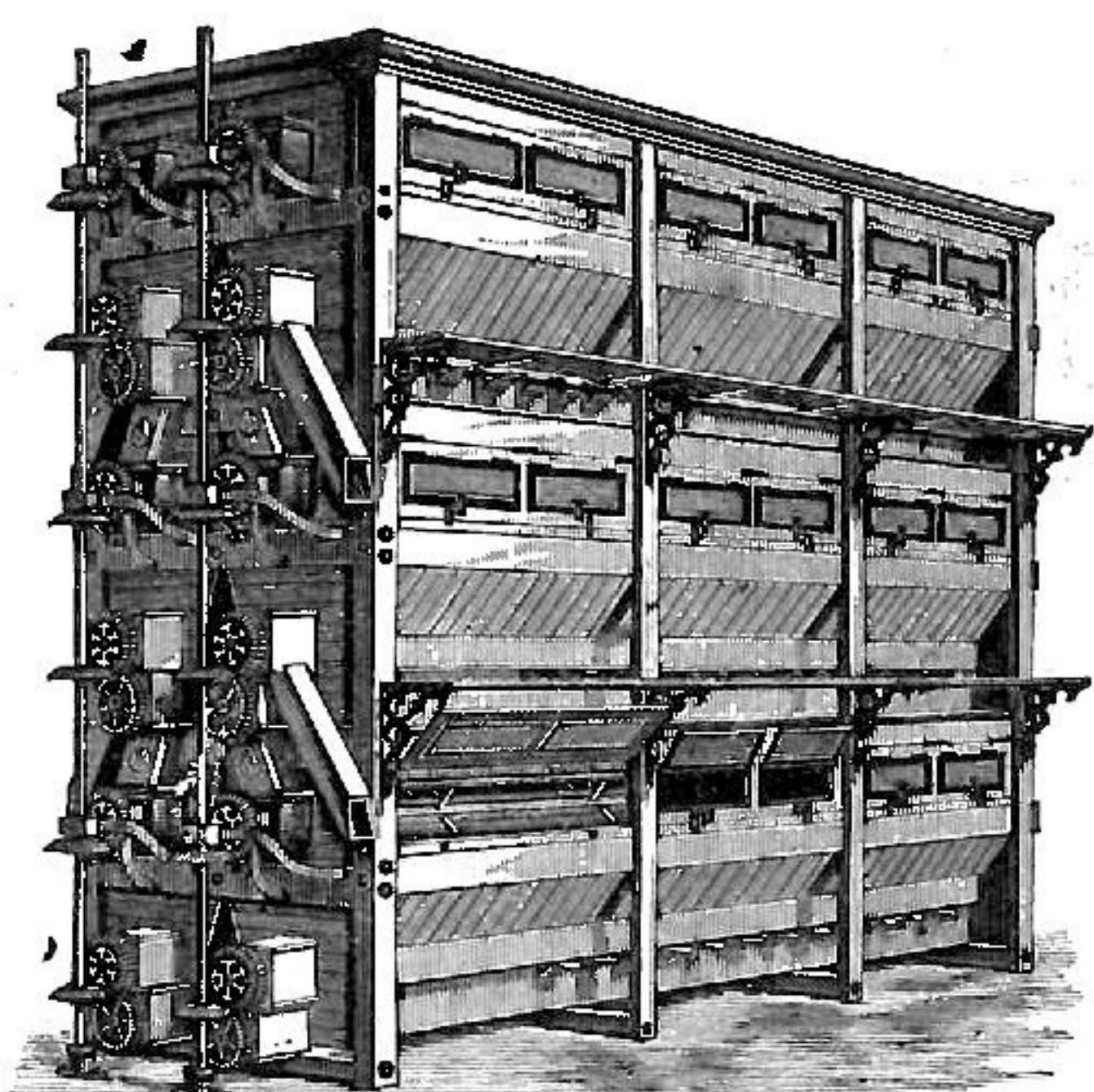
M. DEAL & CO., Sole Owners And Manufacturers, BUCYRUS, OHIO.

RICHMOND CITY MILL WORKS

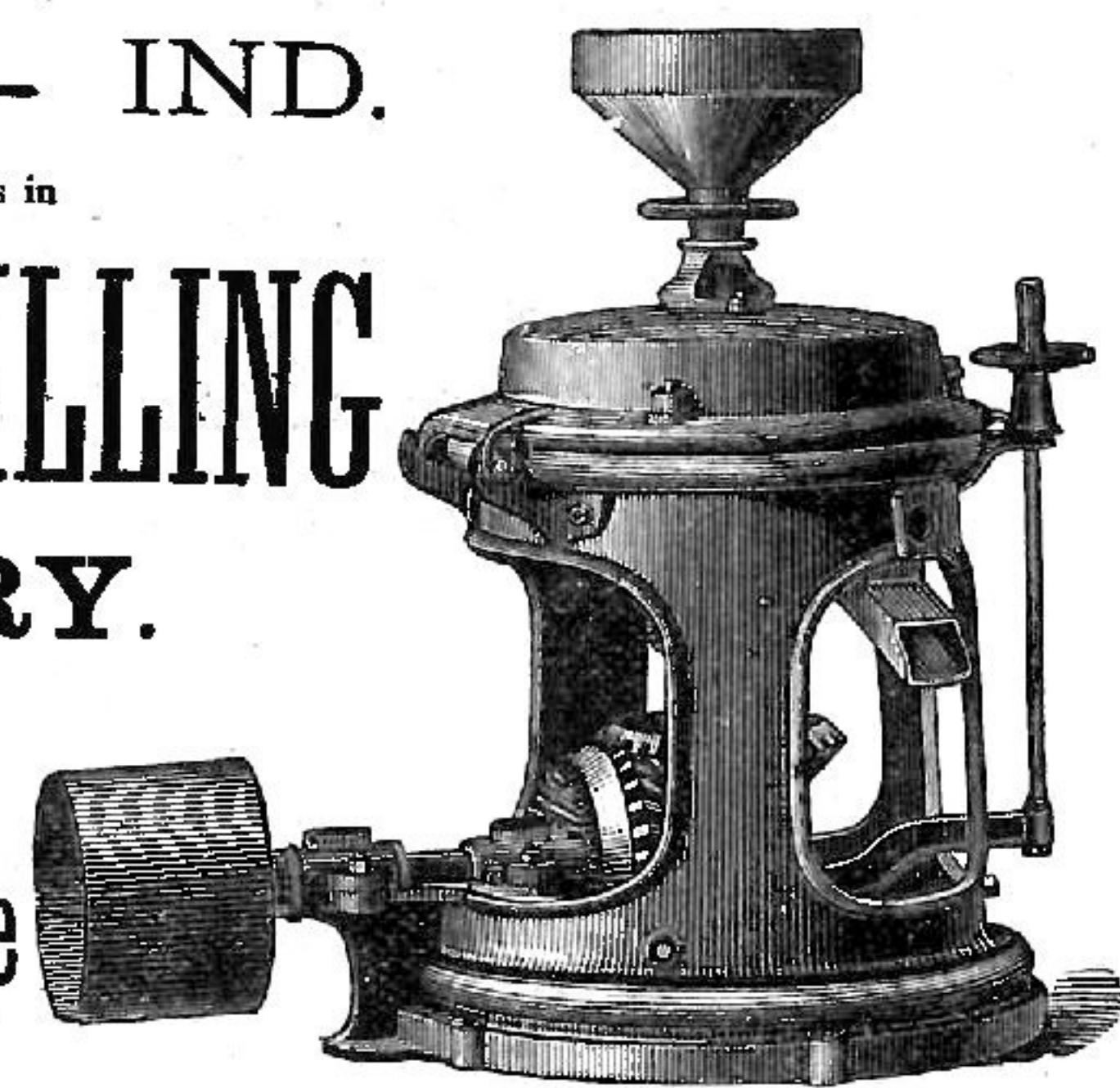
RICHMOND, - IND.

Manufacturers of and Dealers in

IMPROVED MILLING MACHINERY.



WRITE FOR NEW
Illustrated Catalogue
AND
PRICE LIST.



CONTRACTORS FOR COMPLETE OUTFITS.

A Number of Geo. T. Smith Purifiers

AS GOOD AS NEW,

FOR SALE CHEAP

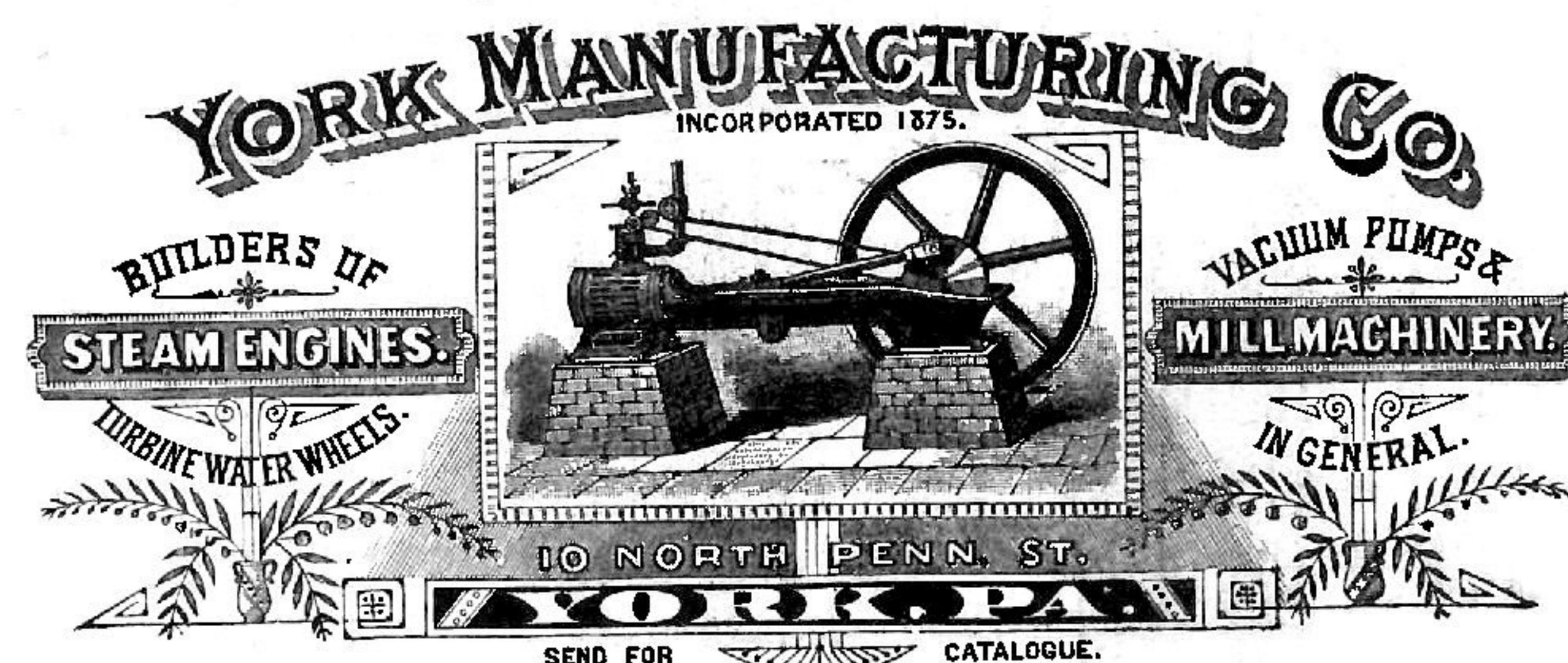
TO MAKE ROOM FOR SUPERLATIVE PURIFIERS.

ADDRESS FOR PARTICULARS,

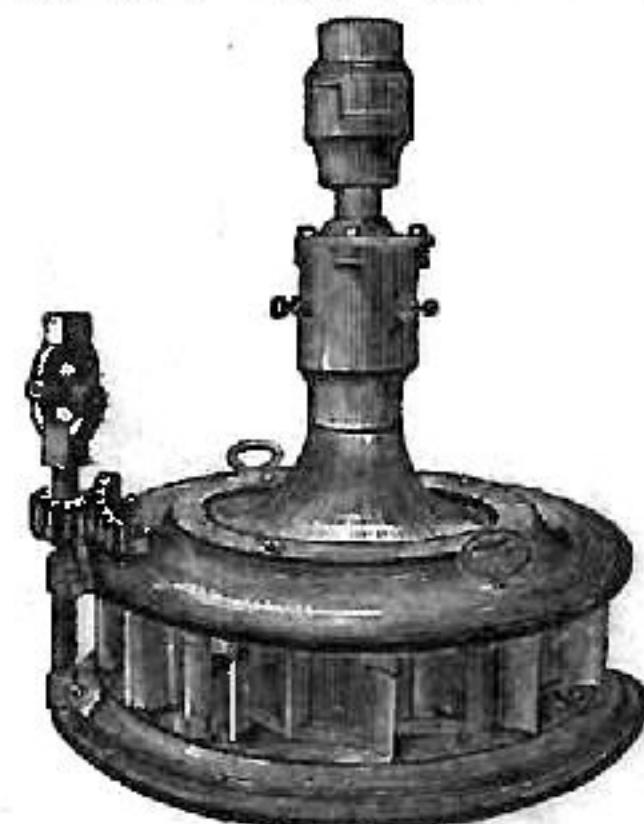
SUPERLATIVE PURIFIER MFG. CO., MILWAUKEE, WIS.

FLINT MILL MACHINERY A SPECIALTY.

POWDER MILL MACHINERY A SPECIALTY.

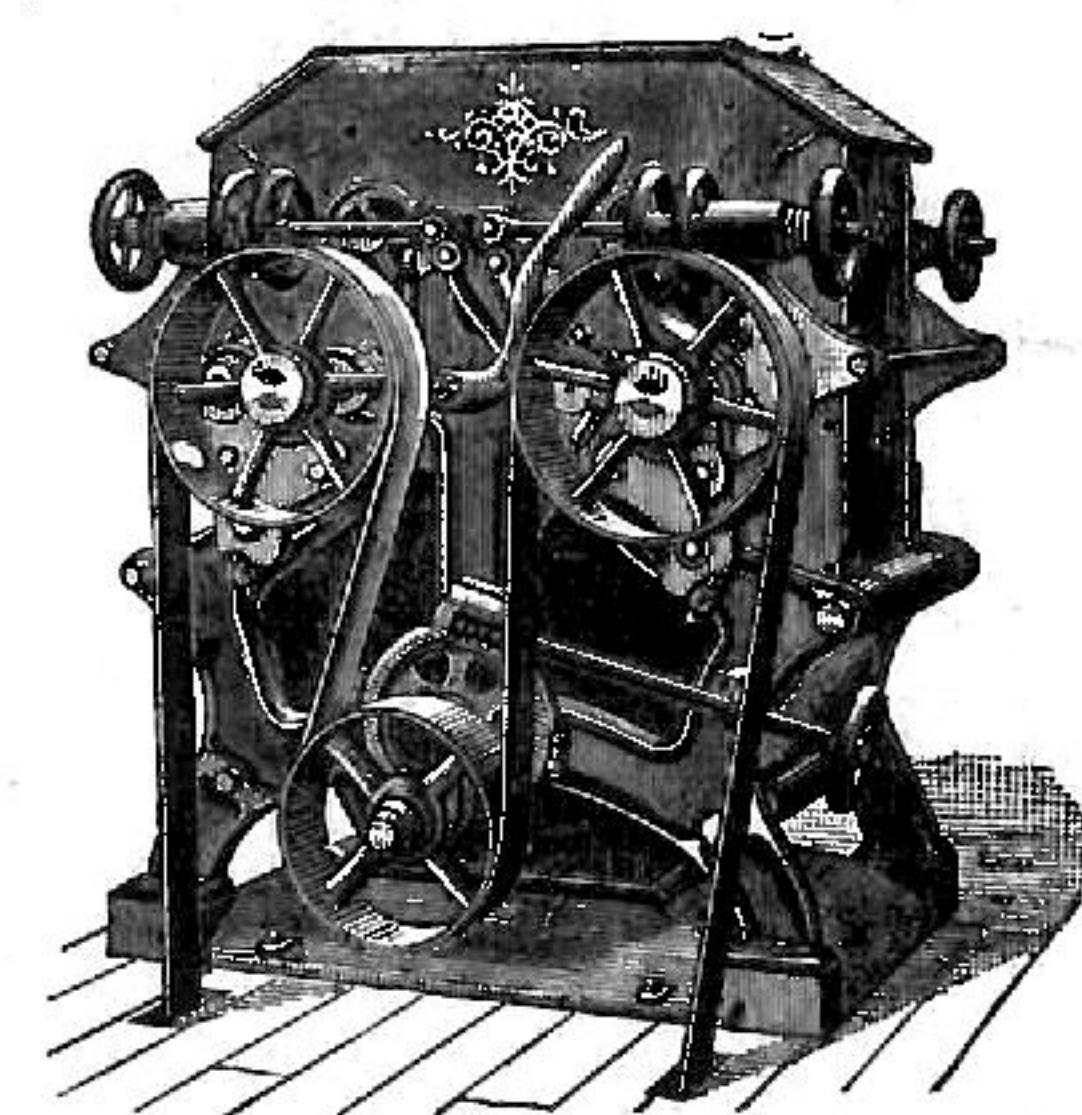


WE BUILD THE IMPROVED

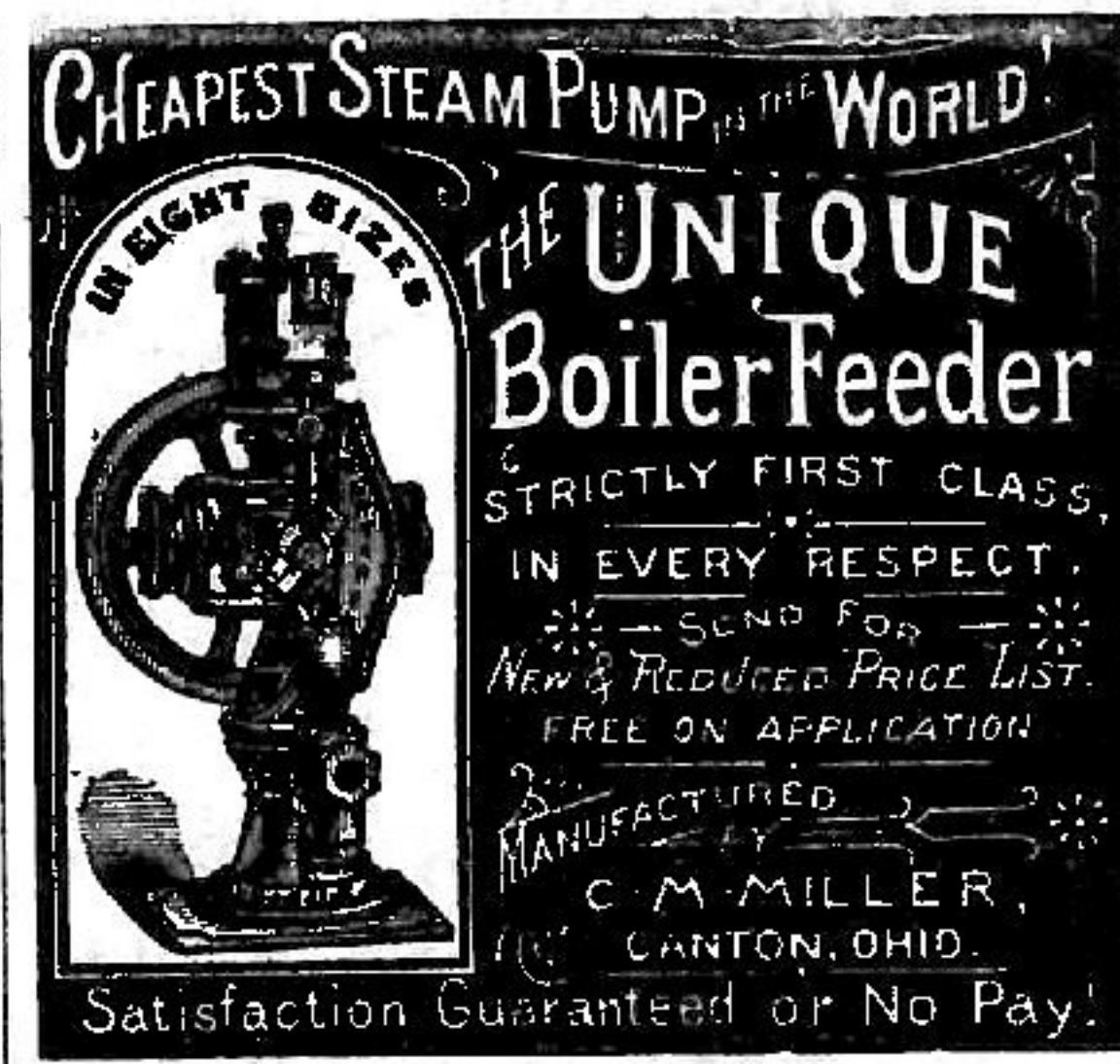


Bollinger Turbine Water Wheel.

SEND for ILLUSTRATED CIRCULAR with PRICES



Roller Mill has all modern improvements and has no superior.



THE MILLER ROLLER MILL AND "TORRENT" AND "UNIQUE" STEAM PUMPS.
C. M. MILLER, CANTON, OHIO.

Toledo Mill Picks and Stone Tool Mfg. Co

Manufacturer and Dresser of

MILL PICKS.

Made of the very best double-refined English cast steel. All work guaranteed. For terms and warranty, address G. W. HEARTLEY, No. 297 St. Clair Street, Toledo, O. Send for Circular.

N. B.—All Mill Picks ground and ready for use (both old and new) before leaving the shop. No time and money lost grinding rough and newly dressed Picks. All come to hand ready for use.

ALSO MANUFACTURERS OF

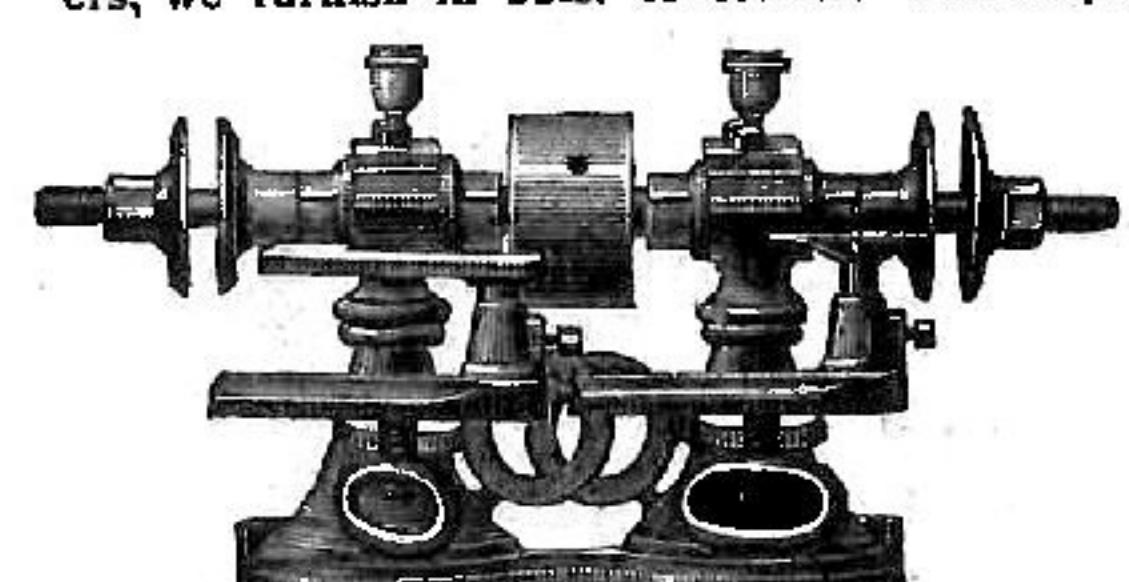
SHAFTING, PULLEYS, HANGERS, COUPLING
AND MACHINE JOBBING.

UNION STONE CO., BOSTON, MASS.

PATENT MILLSTONE CEMENT.

Invaluable to Millers for Repairing and Filling the Joints, This is a new article of manufacture, and is greatly superior to the prepared by an inexperienced person. It is perfectly harmless, containing of French Burr Stone, wears evenly with it, and not only fills the cavities, Good Millstones are now in use, composed entirely of this preparing miller's use, it is put up in cases of two sizes. Price per case: Small, therefore Cash should be sent with order, otherwise we shall send ers, we furnish in bbls. of 300 lbs. Price upon application. Emery

Cavities and Seams in French Burr and other Millstones. parations now in common use by millers. It is much cheaper, and can be nothing of a poisonous nature. It has the nature and attains the hardness ity, but adheres to and becomes a part of the Stone, and assists in grind- tion. The Leading Makers are Adopting it to Build Their Mill stones. For \$3.00; Large, \$5.00. We cannot open an account for so small a sum, C. O. D. by Express, collecting for return of the money. For manufacturer Rub Stones, for hand use in Finishing the Furrows and Faces of Millstones.



Emery Wheel Machine No. 0 Has $\frac{3}{4}$ Inch Arbor.

UNION STONE CO.

38 & 40 Hawley St., Boston, Mass.

PATENTERS AND MANUFACTURERS OF THE

Union Emery Wheels, Emery Wheel Machinery and Tools a Specialty. Wooden Polishing Wheels, Automatic Knife Grinding Machines, Grinders' and Polishers' Supplies. Catalogue on Application.

EMERY, QUARTZ, CORUNDUM.



UNION STONE CO.
BOSTON



DIAMOND TOOLS,
FOR DRESSING OR TRUEING EMERY WHEELS

NORDYKE & MARMON CO., INDIANAPOLIS, IND.

Builders from the Raw Material of

ROLLER MILLS, CENTRIFUGAL REELS, FLOUR BOLTS.

WE ARE THE SOLE OWNERS FOR THE UNITED STATES OF ALL THE PATENTS UPON THIS ROLLER MILL.

*This Is the Only Roller Mill Made Having All the Essentials
Needed In Successful Milling.*

100 BARREL MILL IN TENNESSEE

MESSRS. NORDYKE & MARMON CO., INDIANAPOLIS, IND. MEMPHIS, Tenn., Dec. 16, 1884.

Gentlemen: Our mill, as planned and diagramed by you, has been in steady operation for near one year past, and in proof that you have given us a successful job, we will simply say that in the face of very dull trade, and while other mills were running on short time, we have been running full handed, in order to supply a genuine demand for our flours. We must also notice, that although you only promised us 100 bbl. capacity, we easily make 140 bbls. per day without deteriorating in grades of flours. We use No. 2 wheat, and consume 4 bushels and 28 lbs. in making a barrel of flour. We make about 26 per cent. of very high patent, 68 of bakers' and 6 per cent. of low grade. Yet our mill is so constructed that we may vary these percentages to suit various markets. We have always been victorious in the sharpest competition, and from the first day of starting we have kept the highest position among all roller mills either located or represented in this region.

Yours truly,

G. W. COWEN & CO.

MESSRS. NORDYKE & MARMON CO., INDIANAPOLIS, IND. AKRON, O., April 14, 1885.

Gentlemen: You desire, no doubt, to hear how we mill since your head miller returned home. As I send you samples of our flours, you will find them a credit to any mill. We have compared our different grades with other mills here and find we are ahead, both in quality and percentages, and, as you know, we have several very excellent mills here. My customers make frequent mention to the same effect. I am now only ten days behind orders, and am selling 200 bbls. per week in this town alone, which is *far better* than any other mill is doing. We have not had a single complaint from any source, everything is praise. I made a test run last week, and out of 2,800 bu. of wheat found I was using a little less than 4 bu. and 18 lbs. to the barrel. *This I can swear to;* besides, the wheat was not cleaned. The mill runs nice and without chokes, and although no miller, I believe I could run it successfully myself. It is my honest opinion that *no better mill in America stands to-day than is the "Standard Roller Mill" of Akron, O.* Very truly yours,

C. E. MAURER.

MESSRS. NORDYKE & MARMON CO., INDIANAPOLIS, IND. ST. LOUIS, Mo., Oct. 9, 1884.

Gentlemen: We have just been awarded all the first premiums on flour offered at our great Fair and Exposition. We made a clean sweep of them all, over all competitors, which includes all the mills in St. Louis and all over the west, in fact the entries were open to the whole United States. We received first premium on Patent Flour, first premium on Straight Flour, first premium on Clear Flour. This embraces the entire list, the flour was made on your Rolls, and you should make the fact widely known. Hurrah for the Nordyke & Marmon Co., and Anchor Milling Co.

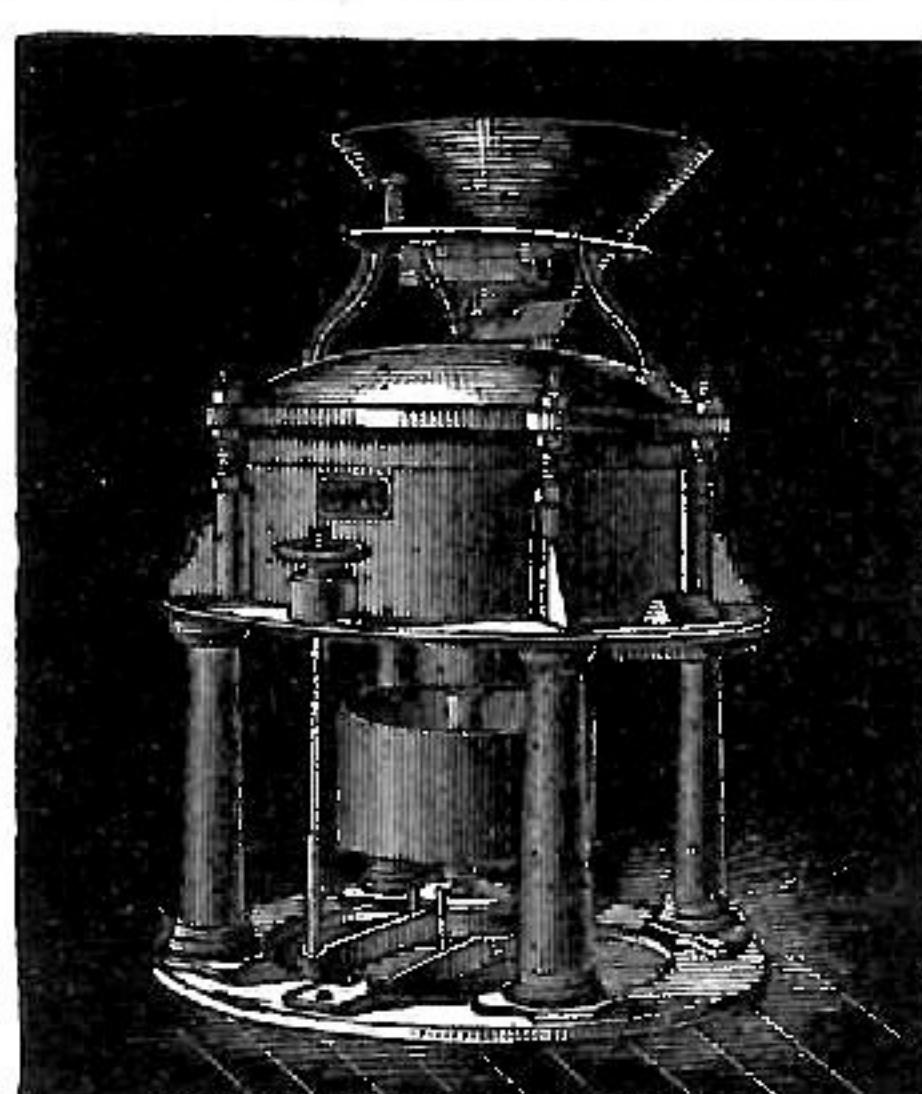
Yours very truly JOHN CRANGLE, Vice Pres't.

Letters on file in our office from a large number of small roller millers giving as favorable reports as above. A portion will be published as occasion demands.

Special Milling Department

MILL BUILDERS AND CONTRACTORS--GUARANTEE RESULTS.

MOTIVE POWER AND ENTIRE EQUIPMENT OF A MODERN MILL FURNISHED UNDER ONE CONTRACT.



MUNSON BROS.

MANUFACTURERS OF

Munson's Celebrated Portable Mills,

FOR WHEAT, MIDDINGS, CORN, FEED, Etc.

Millstones, Hangings, Bolting Chests, Shafting,
Gearing, Pulleys, Hangers, Etc.

DEALERS IN EVERY KIND OF

MILLING MACHINERY,
ENGINES AND BOILERS, WATER WHEELS, Etc.

Genuine Dufour Bolting Cloth.

Specifications, Estimates and Plans furnished.

Address,
P. O. BOX 380.
MUNSON BROS.
UTICA, N. Y.

ESTABLISHED 1840.

[INCORPORATED 1884.]

THE THOMAS BRADFORD CO.

(Successors to Thomas Bradford & Co.)

MANUFACTURERS AND DEALERS IN

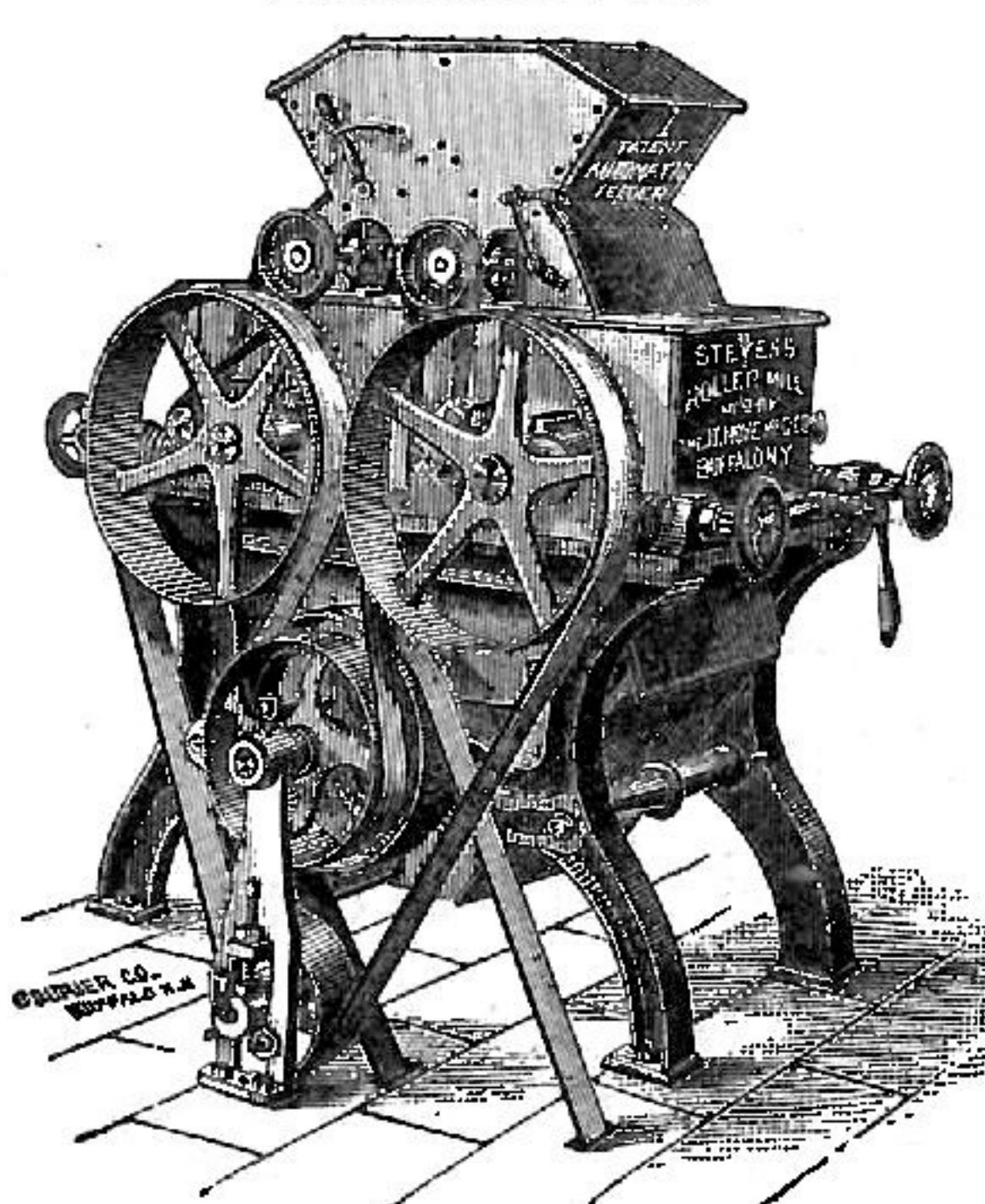
General Flour Mill Machinery

SOLE AGENTS IN CINCINNATI, OHIO, FOR THE

OLD RELIABLE STEVENS ROLLS,
ROUNDS SECTIONAL ROLLER and
CONCENTRATED ROLLER MILLS.

These are the most Simple, Durable and Efficient Rolls in the World. Mills Built or Remodeled to full or partial Roller System and Entire Satisfaction Guaranteed. Plans, Specifications and Estimates cheerfully furnished on application. Correspondence solicited. Address plainly,

THE THOMAS BRADFORD CO., 174, 176 & 178 West 2d St., CINCINNATI, O.



DISTINGUISHING FEATURES OF STEVENS NON-CUTTING ROLLER MILLS

The most substantial in construction..

The best designed frame.

The best feeder.

The best horizontal adjustment.

The best perpendicular adjustment.

The only fine adjustment.

The only successful adjustment made by one hand wheel.

The best spreading device.

The best belt drive.

The best patent noiseless gear.

They have a greater capacity.

They are more easily adjusted.

They are the best in six inch diameters.

They are the most positive in action.

They will out-last any other from 5 to 10 years.

They are famous for evenness and regularity of work.

They will produce more and better shaped middlings.

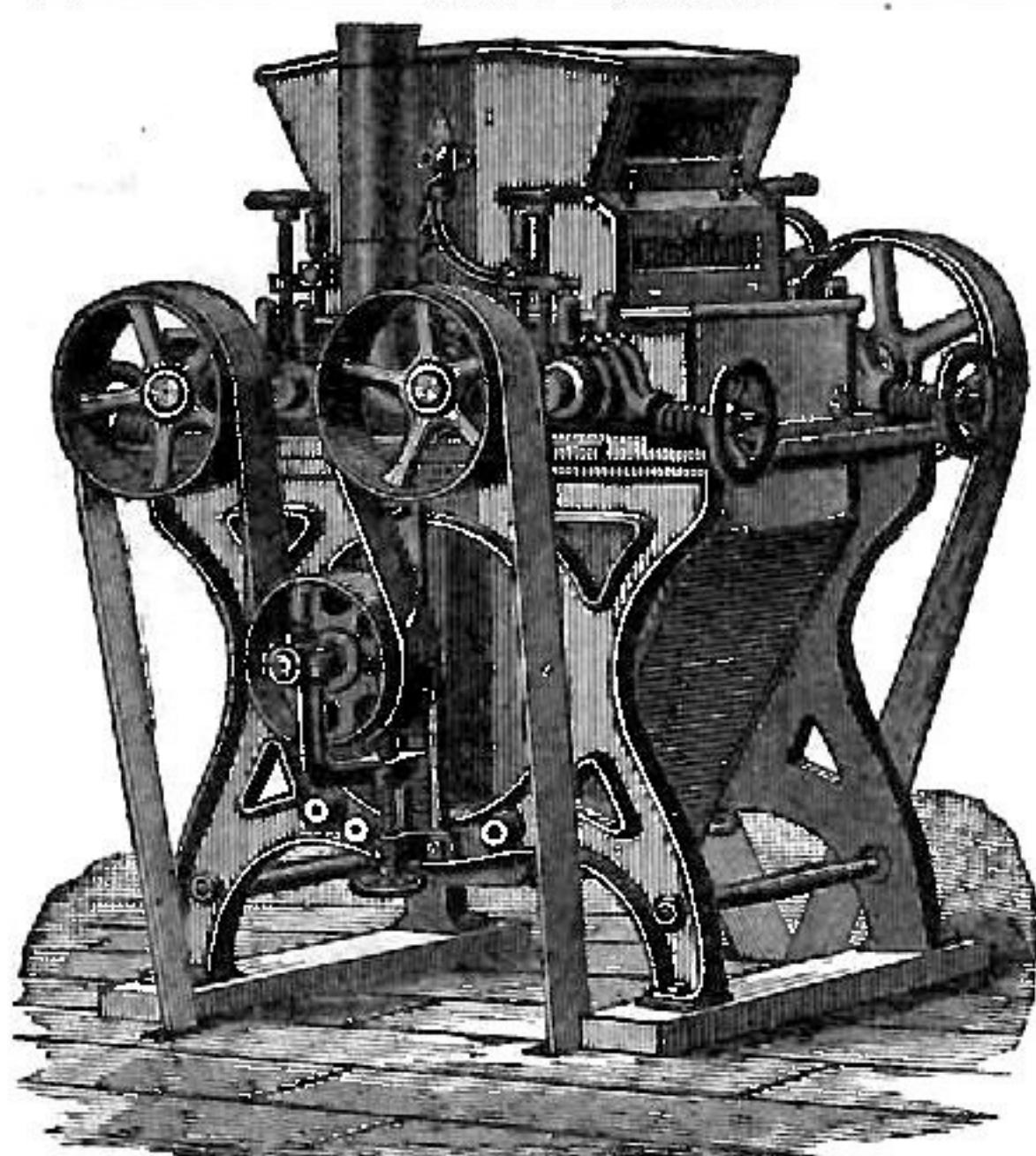
They will produce less break flour.

They will produce a broader and flakier bran.

They give better results on either soft, hard, or mixed wheats.

**THE OVER SIXTEEN THOUSAND IN USE TESTIFY TO THE ABOVE.
SEND FOR ILLUSTRATED PRINTED MATTER.**

THE JOHN T. NOYE MANUF^G. CO., BUFFALO, N. Y.



Rickerson Patent Improved Roller Mill

ORIGINAL SIX INCH ROLLER MILL.

Requires Less Power to Drive, Has Greater Capacity, Better Granulation and More Middlings Than Any Other Roller Mill.

PATENT EXHAUST ATTACHMENT FOR TAKING AWAY GENERATED HEAT.

Positive movement of the rolls, the Journal Boxes having swivel joints, so that all binding is avoided. We do not depend upon the stock to keep the rolls apart, they being regulated by wedges between the stationary and movable boxes. All journals are supplied with oil wells feeding with wicks. The entire machinery is constructed in a first class manner and of the best of material. Send for Catalogue and Circulars before purchasing any Roller Mill.

RICKERSON ROLLER MILL CO., GRAND RAPIDS, MICH.

CHAS. RAKES,

General mill furnisher, contractor and builder. Will furnish plans for the building of new or the remodeling of old mills. Manufactures a full line of grain cleaning machinery including separators, smutters, brush machines, and bran dusters both upright and horizontal. Carries a full Bolting Cloth, and can supply it **LOCKPORT** line of the genuine Dufour or made up to order. Has exclusive control of the celebrated Livingston belted roller mills, and the Gilbert combination Universal 8 roller and 4 roller 6-in. mills, for the eastern and middle states and furnishes them under a full guarantee of operation. Write for prices on any machinery. **NEW YORK.**